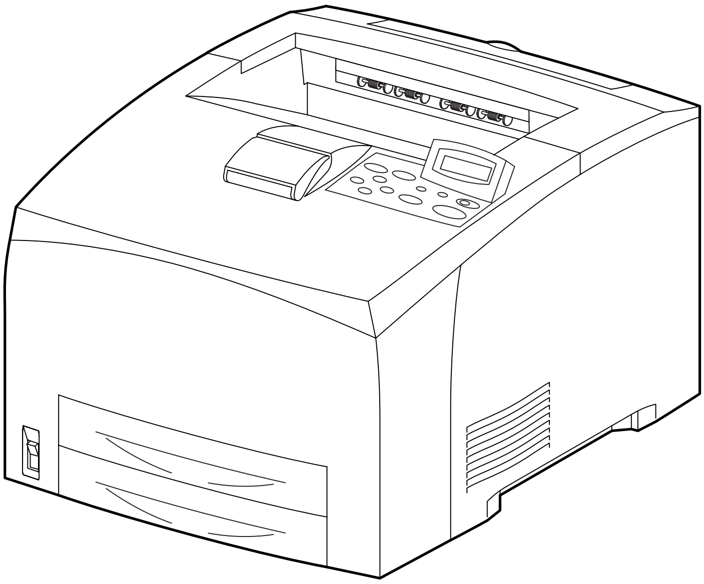
Fujiko ODA
Laser Printer
Base Engine Technical Manual



JG0006AA

Version 1.0

Cautions for operation

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1. About this manual

This manual is a standard service manual of Xerox International Partners containing information required for maintenance of this laser printer (standard specifications).

This manual is intended for use by OEMs under a contract with Xerox International Partners when they provide maintenance services for this laser printer or when they prepare maintenance data. It is prohibited to use this manual for other objects.

The items described as “34PPM” are applied to the unit with 34ppm Print Engine Specifications.
The items describes as “24PPM” are applied to the unit with 24ppm Print Engine Specifications.

2. Marks giving caution

Maintenance operations requiring special cautions or additional information to descriptions of this manual are presented as "Warning", "Caution", or "Note", according to their nature.

WARNING ***If instructions are not observed, death or serious injury may be caused.***

CAUTION **If instructions are not observed, injuries of workers or physical damages to assets (including this laser printer) may result.**

NOTE **Particularly important essentials for procedures, steps, rules, and others.**

Reference ***Incidental information to descriptions.***

3. Related documents

- Instruction manuals (standard manuals)
  Describe operation and handling of this laser printer.

- Performance specifications
  Describe in detail various specifications of this laser printer.
  (In the event of discrepancy between this manual and the performance specifications, the performance specifications shall take preference.)

- Video interface specifications
  Detailed video interface specifications for this laser printer

- Spare parts list
  Information on maintenance parts (spare parts) for this laser printer

4. Safety

To prevent possible accidents during maintenance operation, you should observe strictly the "Warning" and "Caution" information in this manual.

Dangerous operations and operations out of range of this manual should be absolutely avoided.

Generally various processes not covered by this manual may be required in actual operation, which should be performed carefully always giving attention to safety.

4.1 Power source

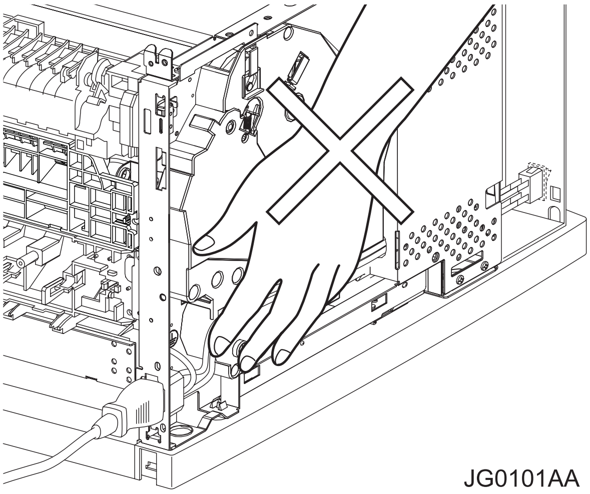
Keep the power supply off during maintenance operation to prevent electric shock, burns and other damages. Keep the power plug disconnected during the maintenance operation.

If the power supply should be kept connected for measurement of voltage or other similar reasons, sufficient care should be given to prevent electric shock, by following the procedures of this manual.

WARNING ***While the printer is ON, never touch live parts if not required absolutely.***

WARNING ***Power is supplied to the power switch / inlet (LVPS ASSY) even while the printer is off. Never touch its live components.***

WARNING ***Do not touch live parts unless otherwise specified.***



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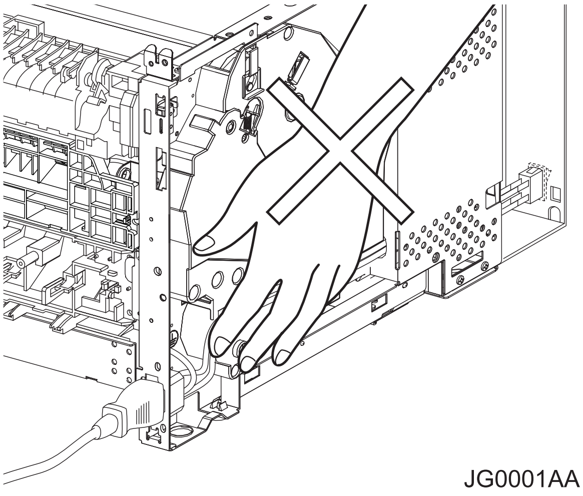


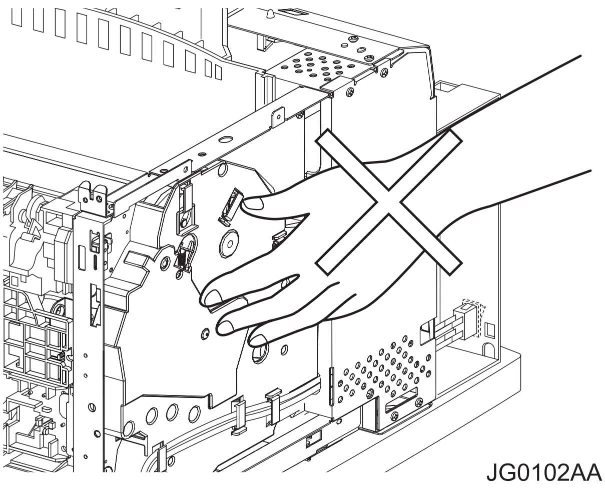
(24PPM)

4.2 Driving units

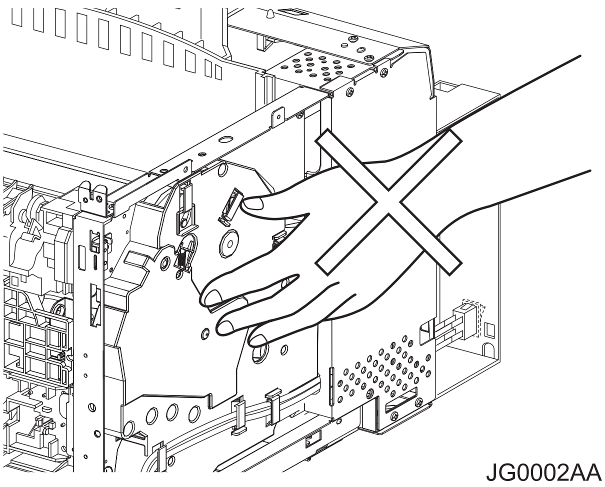
When servicing gears or other driving units, be sure to turn them OFF and plug off. Drive them manually when required.

WARNING

Never touch the gears or other driving units while the printer is running.



(34PPM)

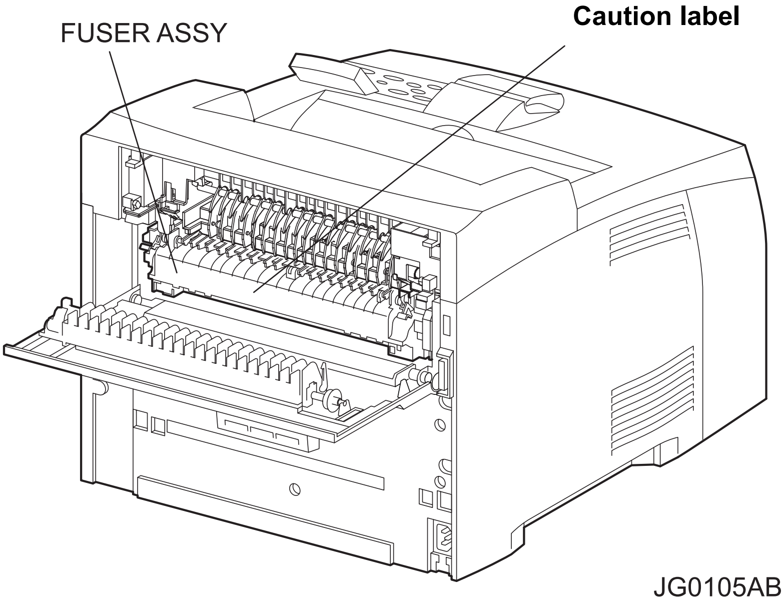


(24PPM)

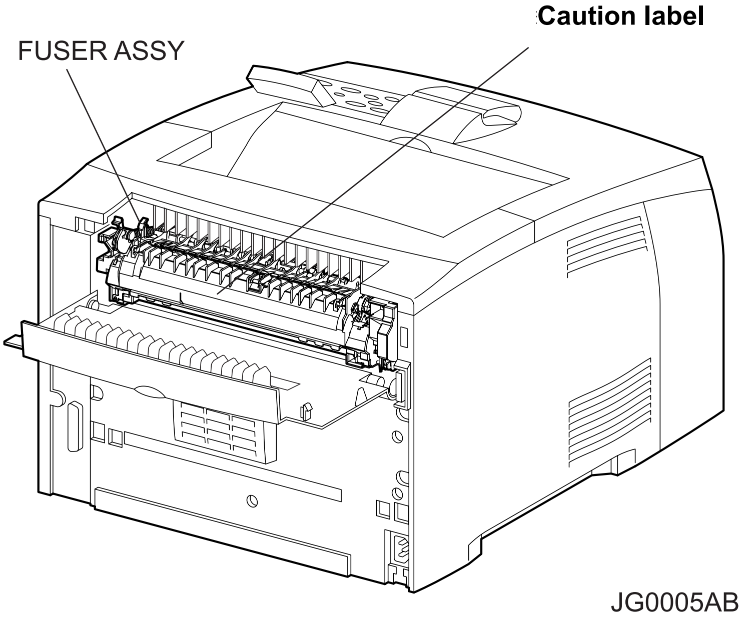
4.3 High-temperature units

When servicing high-temperature units (securing unit, etc.), be sure to turn them OFF to prevent burns, injuries and other troubles, remove the power plug and start service processes after they have cooled down enough.

WARNING ***Immediately after completion of operation, they are still hot. Start services after more than 40 minutes.***


FUSER ASSY
Caution label
JG0105AB

(34PPM)


FUSER ASSY
Caution label
JG0005AB

(24PPM)

4.4 Laser beams

This laser printer has a switch (INTERLOCK S/W 5V) which stops providing power to the laser beam output circuit physically in order to prevent from receiving leaser beam of the leaser beam output unit (ROS ASSY). The switch turns to OFF when the top cover is opened.
Do not turn the switch ON by force except usual operations because there are possibilities that the leaser beam emits light when maintaining.

WARNING

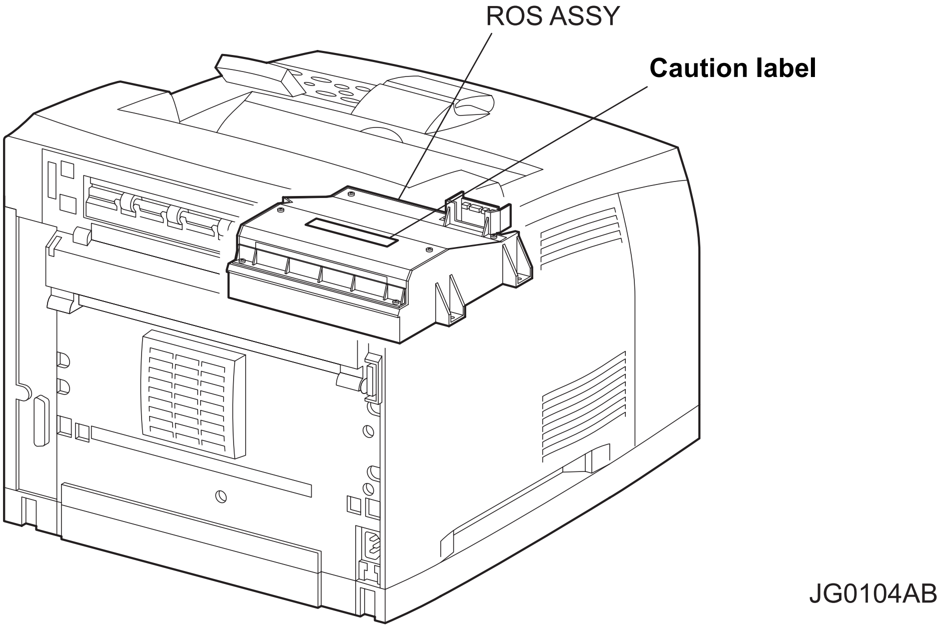
- ***If your eyes are exposed to laser beams, you may lose your eyesight.***
- ***Never open the cover if warning label for laser beams is attached there.***
- ***Before disassembling and reassembling this laser printer, be sure to turn it OFF.***
- ***When servicing this laser printer while it is running, be sure to follow the procedures specified in this manual.***
- ***You should understand the features of the laser beams which are capable of having an injurious action on the human body, not to extend the danger over the workers as well as other people around the printer.***

NOTE

Laser beams have features as follows:

- **Frequencies are smaller in width than other beams (sun and electric bulbs) and phases are uniform so that high monochromatic and convergence performance can be obtained and thin beams of light can reach places at a long distance.**
- **Due to the high convergence, beams are concentrated in high density and high temperature, which is dangerous to human body.**

Reference: Laser beams of this laser printer is invisible rays which you cannot see.


ROS ASSY
Caution label
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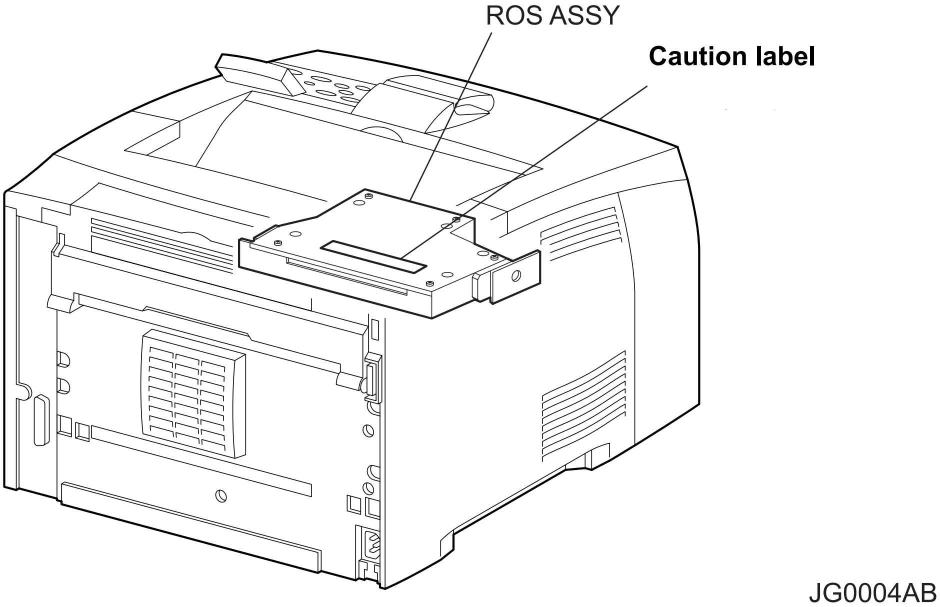
(34PPM)


ROS ASSY
Caution label
JG0004AB

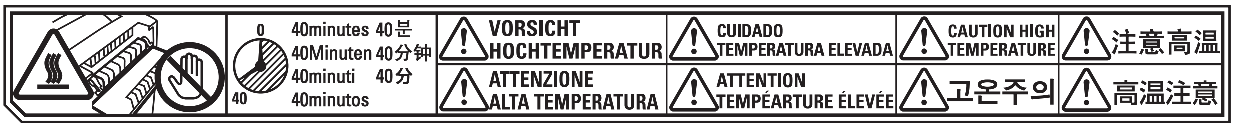
(24PPM)

4.5 Warning/caution labels

Warning labels and caution labels are attached to this laser printer to prevent accidents. Check those labels for their peeling or stain when servicing the printer.

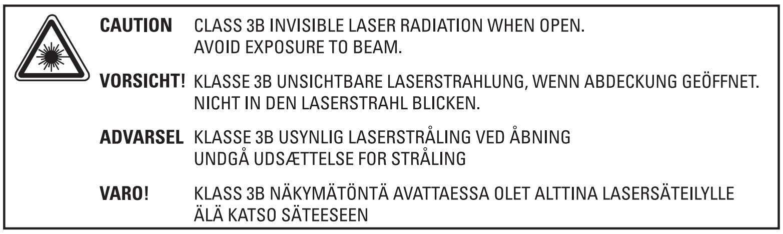
4.5.1 Caution label for high-temperature units

It is labeled to the front side of fusers (FUSER ASSY) which become hot in order to prevent from customers' burn.


0
40
40minutes 40분
40Minuten 40分钟
40minuti 40分
40minutos
VORSICHT HOCHTEMPERATUR
ATTENZIONE ALTA TEMPERATURA
CUIDADO TEMPERATURA ELEVADA
ATTENTION TEMPÉARTURE ÉLEVÉE
CAUTION HIGH TEMPERATURE
고온주의
注意高温
高温注意

4.5.2 Caution label for laser beams

It is labeled to the top side of the output unit of laser beams (ROS ASSY) in order to prevent from that workers for maintenance receive leaser beam.



CAUTION CLASS 3B INVISIBLE LASER RADIATION WHEN OPEN.
AVOID EXPOSURE TO BEAM.

VORSICHT! KLASSE 3B UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET.
NICHT IN DEN LASERSTRAHL BLICKEN.

ADVARSEL KLASSE 3B USYNLIG LASERSTRÅLING VED ÅBNING
UNDGÅ UDSÆTTELSE FOR STRÅLING

VARO! KLASS 3B NÄKYMÄTÖNTÄ AVATTAESSA OLET ALTTINA LASERSÄTEILYLLE
ÄLÄ KATSO SÄTEESEEN

5. Installation

5.1 Power source

Do not plug too many leads into a single socket. Use a dedicated electric outlet and confirm that the power is within the specification.

WARNING

Connect the single power cord to an electric outlet which supplies power more than the maximum power consumption of this laser printer.

5.2 Ground

Be sure to establish the ground of this laser printer.

WARNING

Be sure to connect the ground of this laser printer with one of the followings:

- ***Grounding terminal of an electric outlet***
- ***Copper or the like which is embedded 650 mm or deeper in the ground***
- ***Grounding terminal for which the grounding work has been carried out***

WARNING

Be sure not to establish a ground with the followings:

- ***Gas pipe***
- ***Ground for telephone***
- ***Water pipe which is partially made from plastic***

WARNING

When establishing a ground, be sure not to use the 2pin - 3pin conversion plug.

5.3 Installation location

- Get a necessary space for operations of this laser printer.
- Install where the temperature and the humidity meet the following environment:
- During operation:5 to 35 degree C / 15 to 85 %RH (70%RH at 35 degree C, 85%RH at 32 degree C).
- no condensation
- Not in operation:-20 to 40 degree C / 5 to 85%RH (A place with no condensation)
- Install in a flat place with the angle of gradient of 5 degree or less.
- Install in a place with the illumination of 3000 Lux or less. (Avoid direct sunlight.)
- Avoid a place near a water system, a humidifier or fire, a dusty place, or a place which gets air blasting of an air conditioning.
- Avoid where volatile or flammable gas is generated.
- Avoid an ill-ventilated place.
- Avoid an unstable and non-durable place.

5.4 Unpackings

5.4.1 Unpacking laser printer

CAUTION **The printer must be carried horizontally with two or more persons.**

CAUTION **Extreme care must be taken to avoid personal injuries.**

Unpack the carton, and confirm that the number of the later printer and the attachments, and their appearances have no problem.

1) Laser Printer main unit
2) 150 Paper Cassette
3) 250/550 Paper Cassette
4) EP CARTRIDGE
5) Power Cord
6) Instruction Manual

5.4.2 Unpacking Option Face Up Tray

Unpack the carton, and confirm that the number of the Option Face Up Tray and the attachments, and their appearances have no problem.

1) Option Face Up Tray main unit

5.5 Installation Procedures

5.5.1 Installing laser printer

For details, refer to the Instruction Manual supplied with the main unit.

CAUTION

When holding up the later printer, be sure to grasp the handles with both hands. Grasping a part other than the handles result in fall or damage of the laser printer.

CAUTION

When holding up the later printer, bent your knees thoroughly to prevent the lower back strain.

CAUTION

The protection sheets and the fixing materials, which are removed before the installation, are re-used when the later printer is moved to another place. Be sure to keep them.

1) Unpack the laser printer, and place it in an installation location after removing cushioning materials.
2) Confirm the attachments.
3) Peel off fixing tapes applied to the later printer.
4) Unpack the EP CARTRIDGE, then be sure to shake it seven to eight times holding both sides.

NOTE

When removing the toner seal, draw it out straight and horizontally. After the removal, be careful not to shake or give a shock to the EP CARTRIDGE.

5) Open the COVER OPEN, and install the EP CARTRIDGE.
6) Close the COVER OPEN.
7) Draw the paper tray, and press down the PLATE ASSY BTM to lock.
8) Place papers into the paper tray.

NOTE

When placing papers into the paper tray, be careful for the followings:
- Align four corners of papers to place.
- Adjust the paper guide to the paper size.
- Do not place papers over the capacity or over the upper-limit line of the paper tray.

9) Push the paper tray into the laser printer to install.
10) Connect the power cord.
11) Turn on the power switch of the laser printer.
12) Try some test printings with each paper-feed trays to confirm that there is no problem.

5.5.2 Installing Option Face Up Tray

For details, refer to the Instruction Manual supplied with the main unit.

CAUTION

Before the installation, turn off the power and plug off the power cord.

1) Unpack the Option Face Up Tray, remove cushioning materials, and confirm the attachments.
2) Insert the front edge of the Option Face Up Tray into the slot on the upper-rear of the laser printer to install.
3) Connect the power cord.
4) Turn on the power switch of the laser printer.
5) Try some test printings to eject onto the Option Face Up Tray and confirm that there is no problem.

6. Dismantlement

6.1 Dismantlement procedures

6.1.1 Dismantling laser printer and option units

For details, refer to the Instruction Manual or Chapter 3 Removal and Replacement Procedures.
Perform the dismantlement in the reverse procedures of the installation.

CAUTION **When holding up the later printer, be sure to grasp the handles with both hands. Grasping a part other than the handles results in fall or damage of the laser printer.**

CAUTION **When holding up the later printer, bent your knees thoroughly to prevent the lower back strain.**

NOTE **Be sure to remove the EP CARTRIDGE from the laser printer and put it into a plastic bag to dismantle.**

NOTE **Be sure to re-use the protection sheets and fixing materials, which are removed at the installation.**

NOTE **Confirm that no attachment is lacked.**

NOTE **Be sure to use the cushioning materials properly.**

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NOTE **This manual is based on the standard specifications of Fuji Xerox Printing Systems Co., Ltd. on the assumption that the printer controller is working properly.
When the printer controller controls operation directly or any OEM has its unique specifications, the operation may be different from description in this manual.**

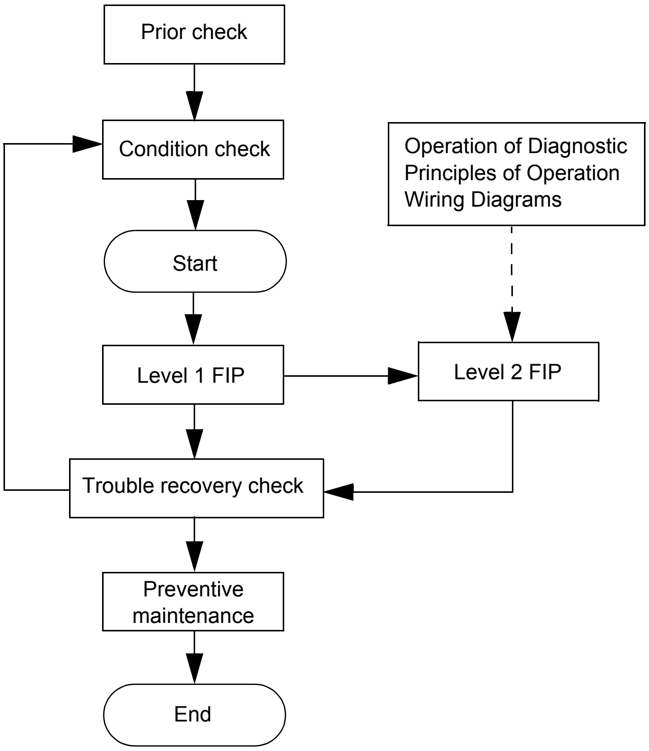
NOTE **Troubleshooting in this manual assumes use of Diag. tools (maintenance tools). However, the troubleshooting allows for the case where the Diag tools are not used. You can correct troubles according to these troubleshooting procedures after understanding them well.**

1. Progressing with the Troubleshooting

After making sure of actual condition of a trouble, proceed with the troubleshooting process efficiently making use of the Fault Isolation Procedure (FIP), Operation of Dignostic (Chapter 2), Wiring Diagrams (Chapter 7), and Principles of Operatin (Chapter 6).

1.1 Flow of Troubleshooting

Flow of the troubleshooting is as follows:


Prior check
Condition check
Operation of Diagnostic
Principles of Operation
Wiring Diagrams
Start
Level 1 FIP
Level 2 FIP
Trouble recovery check
Preventive maintenance
End

1.2 Preparatory Requirements

Be sure to check the following items before starting the troubleshooting procedures:

1) Voltage of the power supply is within the specifications (measure the voltage at the electric outlet).

2) Power cord is free from breakage, short-circuit, disconnected wire, or incorrect connection in the power cord.

3) The laser printer is properly grounded.

4) The laser printer is not installed at a place subjected to too high temperature, too high humidity, too low temperature, too low humidity or rapid change of temperature.

5) The laser printer is not installed close to water service, humidifier, heat generating unit, or fire, in very dusty place, or a place exposed to air flow from the air conditioning system.

6) The laser printer is not installed in a place where volatile gas or inflammable gas is generated.

7) The laser printer is not installed under direct sunbeams.

8) The laser printer is installed in a well-ventilated place.

9) The laser printer is installed on a stout and stable plane.

10) Paper used meets specifications (standard paper is recommendable).

11) The laser printer is handled properly.

12) Parts which should be periodically replaced are replaced each time when specified number of sheets have been printed.

1.3 Cautions for Service Operations

1) Be sure to remove the power cord except when it is specifically required.

WARNING

If the printer is kept ON, never touch the conductive parts while it is not specifically required.

The power switch and inlet of LVPS is live even while the power supply is cut off. Never touch the live parts.

2) When checking some parts with covers removed and with the interlock and safety and power switches ON, remove the connector (P/J140) on the ROS ASSY except when it is specifically required.

WARNING

When checking some parts with covers removed and with the interlock and safety and power switches ON, laser beams may be irradiated from the ROS ASSY. Since it is dangerous, be sure to remove the connector (P/J140) while it is not required.

3) When checking some parts with the left cover removed and power ON, be sure to remove the connector (P/J31) on the HVPS/MCU while it is not required.

WARNING

When checking some parts with the left cover removed and power ON, high voltage may be applied by the HVPS. Be sure to remove the connector (P/J31) on the HVPS/ MCU.

When connecting the connector (P/J31) on the HVPS/MCU according to the instructions of the FIP, never touch the HVPS and parts of high voltage.

4) When using Diag. tools or other tools of high voltage, be sure to keep them covered except when otherwise specified.

WARNING

When using Diag.Tool or other tools of high voltage, never touch parts of high voltage.

When using Diag. Tool or other tools of high voltage, be sure to follow the procedure of this manual.

5) When operating the driving units using the Diag or other tools, be sure to keep them covered unless otherwise specified.

WARNING

When operating the driving units using the Diag or other tools, never touch the driving units. When operating the driving units using Diag or other tools, be sure to follow the procedures in this manual.

6) When touching hot parts, be careful not to get burnt.

7) Workers should wear a wrist band or the like to remove static electricity from their body, grounding their body while working.

1.4 Cautions for FIP Use

1) It is assumed in the FIP that the printer controller (PWBA ESS) is normally functioning. If any trouble cannot be corrected by troubleshooting, replace the printer controller with a normal one and check for proper operation again.
   If the trouble is not still corrected, replace the major parts and then related parts in succession and confirm according to the procedure of the "Check".

2) When troubleshooting according to the FIP, normal HVPS/MCU, LVPS, FUSER ASSY, BTR ASSY and so no may be necessary for isolation of failed parts. Prepare them in advance.

3) In the initial check according to the FIP, check only items which can be simply checked.

4) In the initial check according to the FIP, check the constitutive parts of the major check parts and related parts, as well as major check parts.

5) When working with the printer, be sure to remove the power cord except when required specifically. Never touch live parts if not required, while the power cord is connected.

6) Connector condition is denoted as follows:
   [P/J12] → Connector (P/J12) is connected.
   [P12] → Plug side with the connector (P/J12) removed (except when attached directly to the board).
   [J12] → Jack side with the connector (P/J12) removed (except when attached directly to the board).

7) [P/J1-2PIN <=> P/J3-4PIN] in the FIP means measurement with the plus side of the measuring instrument connected to [2PIN] of [P/J1] and the minus side to [4PIN] of [P/J3].

8) [P/J1<=> P/J2] in the FIP means measurement for all terminals corresponding between [P/J1] and [P/J2] referring to "Wiring Diagrams".

9) In [P/J1-2PIN <=> P/J3-4PIN] in the FIP where voltage is measured, [P/J3-4PIN] on the rear minus side is always at the AG (analog ground), SG (signal ground), or RTN (return).
   Therefore, after checking of proper continuty between AGs, SGs, or RTNs respectively, the rear minus side can be connected to the PIN of AG, SG or RTN instead of [P/J3-4PIN].
   However, care should be taken not to mistake since [AG], [SG], and [RTN] are not on the same level.

10) Measure the voltage of small connectors with the special tool. Handle the tool with care, as the leading edge of the tool is pointed.

11) When measuring the voltage, set the EP CARTRIDGE, BRT ASSY and paper tray, close the COVER TOP ASSY, FUSER ASSY, and COVER REAR and power ON if not required specifically.

12) Numerical values in the FIP are only for standard. If numerical values are approximate, they should be considered permissible.

13) Parts which are always removed to check as indicated in the FIP and procedures for that purpose are not specifically referred to here. They should be handled carefully.

14) “Replacement” in the FIP indicates replacement of parts which are considered to be the source of trouble to be checked after replacing those parts, assemblies containing them (HIGH ASSY).

15) The FIP describes the first tray on the lower part of the devie as “Tray 1,” and the second tray as “Tray 2”, and the first tray of Option 550 Paper Feeder as “Tray 3”, and the second tray as “Tray 4”.

16) In the FIP, existence and non-existence of Diag tools (maintenance tools) are distinguished in some cases. Correct troubles according to the instructions in the FIP.

17) In the FIP, procedures are differentiated depending on specifications. Correct troubles according to the instructions in the FIP.

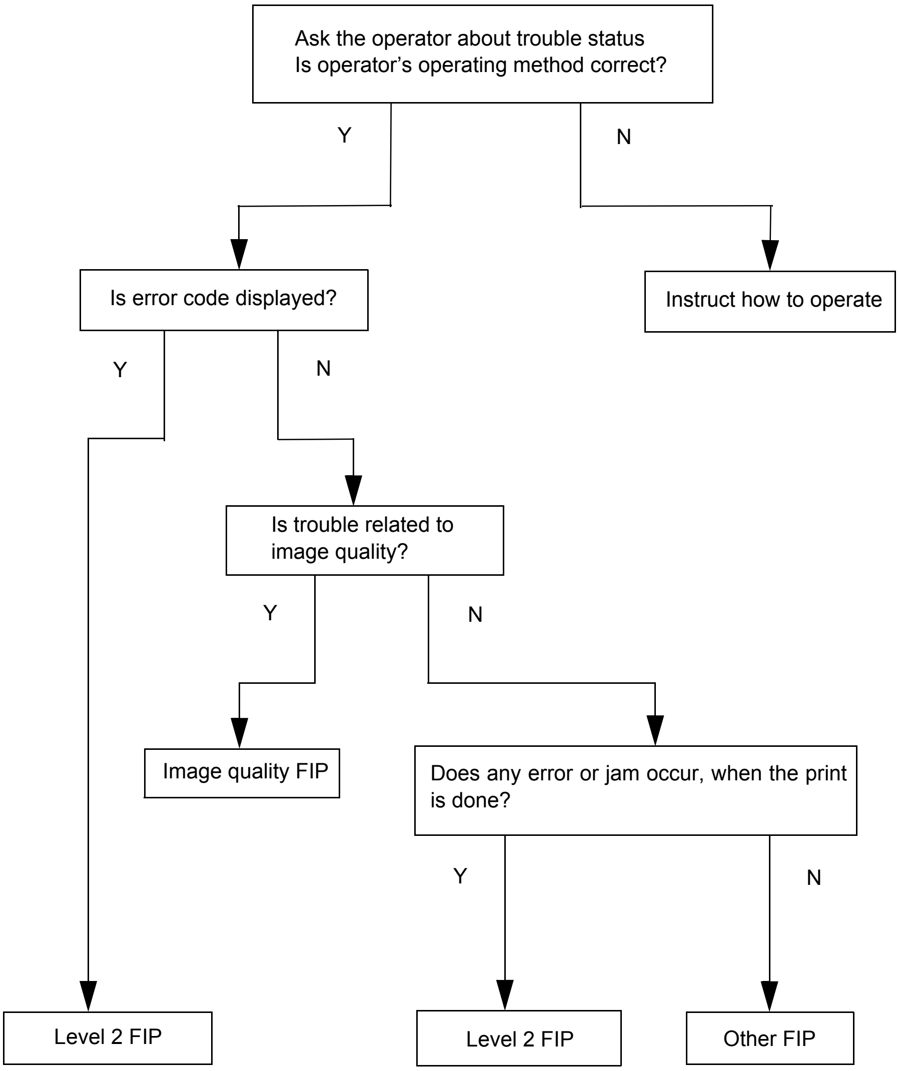
18) For optional parts, some troubleshooting procedure may follow the manual for those options, of which you should take note.
Keep those manuals for the optional parts when required.

2. Level 1 FIP

2.1 Level 1 FIP

The level 1 FIP is the first step for trouble diagnosis. The level 1 FIP isolates the presence of various troubles including error codes, and the level 2 FIP provides a guide for proceeding of the troubleshooting.

2.2 Flow of Level 1 FIP


Ask the operator about trouble status
Is operator's operating method correct?
Y
N
Is error code displayed?
Instruct how to operate
Y
N
Is trouble related to image quality?
Y
N
Image quality FIP
Does any error or jam occur, when the print is done?
Y
N
Level 2 FIP
Level 2 FIP
Other FIP

2.3 Error/Status Code List

NOTE

For information about the following FIP items described in “FIP to be referred” column in the following table, refer to the manual of each Option unit.
FIP1.22 through 25: Option 550 Paper Feeder
FIP1.26 through 32: Option Duplex
FIP1.37 through 43: Option OCT

Chain	Link	Fault Items	Conditions of detect/Methods of treatment	Ref FIP
001	300	Top Cover Open	Detect Top Cover or Top Cover & Rear Cover OpenDefect of SWITCH I/L ASSY, Confirmation of contact/wiring	FIP1.6
001	301	Rear Cover Open	Detect Rear Cover Open onlyDefect of INTERLOCK S/W REAR, Confirmation of contact/wiring	FIP1.6
001	302	OCT Cover Open	Detect OCT Cover OpenDefect of SWITCH REAR COVER, Confirmation of contact/wiring	FIP1.37 (Separate volume)
001	306	Duplex Cover Open	Detect Duplex Cover OpenDefect of SWITCH DUPLEX, Confirmation of contact/wiring	FIP1.26 (Separate volume)
001	398	FAN Motor Fail	One of FAN MAIN or FAN SUB doesn’ t rotate in specified revolutions. Defect and replacement of Fan Main /Fan Sub Disconnection between MCU PWB J24-16 and Fan Main J244B Disconnection between MCU PWB J27-17 and Fan Sub J270B	
003	346	Scope-FD send error detected by Controller(Parity error)	Communication fails is caused because ACK is not received by resend in twice.Parity error is detected in HARDWARE of IOT side. If the trouble is not recovered by powering OFF and ON, execute the following. - Check the connection of HVPS/MCU connect harness. - If the trouble is still caused, replace HVPS/MCU PWB.	-
003	347	Scope-FD send error detected by Controller(Framing error)	Framing error is caused because ACK is not received by resend in twice. If the trouble is not recovered by powering OFF and ON, execute the following. - Check the connection of HVPS/MCU connect harness. - If the trouble is still caused, replace HVPS/MCU PWB.	-
003	348	Send error detected by Controller Detect incorrect command in sending ENOSTR	Power OFF and ON	-
003	349	Send error detected by Controller Sending under runESPIPE	Power OFF and ON	-
003	350	Varieties of errors detected by Controller EIO	Power OFF and ON	-
003	354	Parity error is caused in receiving a status from IOT	It is caused when receiving NAK which reporting the communication fail. Check the connection of HVPS/MCU connect harness. If the trouble is still caused, replace HVPS/MCU PWB.	-
003	356	Overrun is caused in receiving a status from IOT	It is caused when receiving NAK which reporting the communication fail.Check the connection of HVPS/MCU connect harness. If the trouble is still caused, replace HVPS/MCU PWB.	-
003	360	Initialization error between IOT-ESS	Fail to initialize IOT (MCU). Check the connection of HVPS/MCU connect harness. Replace HVPS/MCU PWB.	-
003	362	PAGE-SYNC is caused before the preparation of video output is completed.	PageSync becomes active before writing output data until buffer becomes full when printing. Replace the harness to connect ESS and IOT. Replace ESS PWB.	-

Chain	Link	Fault Items	Conditions of detect/Methods of treatment	Ref FIP
003	363	PAGE-SYNC finish error in outputting video	PageSync becomes inactive before the specified size is printed out when printing. Replace the harness to connect ESS and IOT. Replace ESS PWB.	-
003	364	DMA transfer error	Compression/decompress is not finished though the specified data is input when compressing or decompressing. Insert and remove RAM on ESS PWB (if it exists) Execute the DC355 DIAG test, and replace HDD if the trouble is not recovered. Replace ESS PWB.	-
003	367	Other errors from Decompress	Detect Line Sync incorrectly. Connection of connecters between ESS PWB J32 and MCU PWB J14, disconnection of Flat Cable, or loose connection. Replace ESS PWB if no problem with Flat Cable.	-
003	368	PCI Bus Error	Access of PCI causes trouble due to the defect of PCI bus. When it is not recovered by powering OFF and On, replace ESS PWB.	-
003	370	Marker code detect error	The finish code is not found in the compressed data (FF02) when depressing the data in specified size. When it is not recovered by powering OFF and On, execute the following. In case of that the specific documents cause the trouble. The possibility of software problem is high. 1. Changing print mode (normal/high quality/high resolution) may print out. 2. Changing RAM size may print out. A. Change RAM size to install B. Change the used size of RAM (Change the setting of port, or received buffer size) In case of that the most of documents cause the trouble. The possibility of hardware problem is high. 1. Change RAM 2. Execute the DC355 DIAG test, and replace HDD if the trouble is not recovered. 3. Replace ESS PWB	-
003	371	IOT-ESS Communication Fail 1	No response from IOT PWB to ESS PWB sending.MCU PWB J14, disconnection of Flat Cable, or loose connection. Replace ESS PWB if no problem with Flat Cable. When it is not recovered yet, replace MCU PWB.	-
003	372	IOT-ESS Communication Fail 2	ESS PWB detects DLL send error. MCU PWB J14, disconnection of Flat Cable, or loose connection. Replace ESS PWB if no problem with Flat Cable. When it is not recovered yet, replace MCU PWB.	-
003	600	Billing Fail 3	Auto recovery of Billing Master Counter. Already registered to History (Hide Fail)	-
003	601	Billing Fail 4	Auto recovery of Billing Backup Counter 1. Already registered to History (Hide Fail)	-
003	602	Billing Fail 5	Auto recovery of Billing Backup Counter 2. Already registered to History (Hide Fail)	-
003	747	Print Instruction Fail	The combinations of printing parameter is not correct such as sets [Tray paper size] to[Auto] of operational panel, sets [Select paper tray] to[Auto] of printer driver, and indicates the printing in indeterminate size.Check printing indication.	-
003	946	Tray 1 Not In Position	Tray 1 is not set. Defect of GUIDE TRAY L ASSY Disconnection of wires from GUIDE TRAY L ASSY J180 to MCU PWB J18 or loose connection. Defect of MCU PWB	FIP1.13

Chain	Link	Fault Items	Conditions of detect/Methods of treatment	Ref FIP
003	947	Tray 2 Not In Position	Tray 2 is not set. Defect of GUIDE TRAY L ASSY Disconnection of wires from GUIDE TRAY L ASSY J210 to MCU PWB J18 or loose connection. Defect of MCU PWB	FIP1.13
003	948	Tray 3 Not In Position	Tray 3 is not set. Defect of OPT ASSY SIZE Disconnection of wires from OPT ASSY SIZE J800 to PWB FEEDER 250/550 J80 or loose connection. Defect of MCU PWB	FIP1.22 (Separate volume)
003	949	Tray 4 Not In Position	Tray 4 is not set. Defect of OPT ASSY SIZE Disconnection of wires from OPT ASSY SIZE J800 to PWB FEEDER 250/550 J80 or loose connection. Defect of MCU PWB	FIP1.22 (Separate volume)
003	950	Tray 1 No Paper	Out of paper in Tray 1. Defect of Tray 1 No Paper Sensor Disconnection of wires from Tray 1 No Paper Sensor J240 to MCU PWB J24 or loose connection. Defect of MCU PWB	FIP1.14
003	951	Tray 2 No Paper	Out of paper in Tray 2. Defect of Tray 2 No Paper Sensor Disconnection of wires from Tray 2 No Paper Sensor J246 to MCU PWB J24 or loose connection Defect of MCU PWB	FIP1.14
003	952	Tray 3 No Paper	Out of paper in Tray 3. Defect of Tray 3 No Paper Sensor Disconnection of wires from Tray 3 No Paper Sensor J852 to MCU PWB J85 or loose connection Defect of MCU PWB	FIP1.23 (Separate volume)
003	953	Tray 4 No Paper	Out of paper in Tray 4. Defect of Tray 4 No Paper Sensor Disconnection of wires from Tray 4 No Paper Sensor J852 to MCU PWB J85 or loose connection Defect of MCU PWB	FIP1.23 (Separate volume)
003	959	Tray 1 Paper Size Mismatch	The paper in Tray1 and the paper specified printing is different. Failure of paper guide setting or breakage failure Defect of GUIDE TRAY ASSY Defect of MCU PWB	FIP1.12
003	960	Tray 2 Paper Size Mismatch	The paper in Tray2 and the paper specified to print are different. Failure of paper guide setting or breakage failure Defect of GUIDE TRAY ASSY Defect of MCU PWB	FIP1.12
003	961	Tray 3 Paper Size Mismatch	The paper in Tray3 and the paper specified to print are different. Failure of paper guide setting or breakage failure Defect of OPT ASSY SIZE Defect of MCU PWB	
003	962	Tray 4 Paper Size Mismatch	The paper in Tray4 and the paper specified to print are different. Failure of paper guide setting or breakage failure Defect of OPT ASSY SIZE Defect of MCU PWB	
003	965	ATS/APS No Paper	The paper which is specified to print is not in the tray. Check whether paper is set correctly or not. Check No Paper Sensor of each tray.	
003	966	ATS/APS No Destination Error	No paper which is specified size, direction to print in the tray. Failure of paper guide setting of each tray or breakage failure Defect of each tray' s Paper Size Sensor	
004	362	NVM Read/Write Error	Correct Read/Write of NVM on MCU PWB is not possible. When it is not recovered by powering OFF and On, replace MCU PWB.	FIP1.1

Chain	Link	Fault Items	Conditions of detect/Methods of treatment	Ref FIP
004	363	Main Motor fail of rotation	Main Motor fail of rotation Power OFF and /ON. Replace Main Motor.	FIP1.5
004	922	No Toner	Time to change drum/toner cartridge Change drum/toner cartridge	FIP1.16
006	335	ROS Motor fail of rotation	Revolution of ROS Motor doesn' t become the correct ones for 15sec and 2sec while Warm Up and Run, respectively. Defect of ROS Motor(ROS Assy) Disconnection of wires from MCU PWB J14 to ROS Assy J140 or loose connection.	FIP1.2
007	313	Option Tray 4cCommunucation Fail	The response of communication with RemoteCPU is error. Check the connection to Option Tray 4.	FIP1.25 (Separate volume)
007	950	Tray 1 Paper Size Mismatch (length slows scan direction error)	Defect that the length (slows scan direction) of paper fed from Tray 1/ 2/3/4 is different form the specified length by measuring with REGI. Sensor. Slip of paper feeding roll, wear, fail of rotation Wear of paper feeding gear, jumping, fail of rotation Dirt or defect of REGI. Sensor REGI. Clutch slip, operational falure	FIP1.14
007	951	Tray 2 Paper Size Mismatch (length slows scan direction error)		
007	952	Tray 3 Paper Size Mismatch (length slows scan direction error)		FIP1.23 (Separate volume)
007	953	Tray 4 Paper Size Mismatch (length slows scan direction error)		
008	153	Feed Jam 1(Early Feed Jam)	Paper is fed to Regi too fast. Check paper set, dirt or defect of REGI. Sensor	FIP1.10
008	155	Regi Sensor On Jam	Regi Sensor is On while Warming up.Scrap of paper is left, dirt or defect of REGI. Sensor	FIP1.9
008	156	Regi Sensor Off Jam	Paper is not fed from Reg position to Fuser position within the specified time. Slip of REGI. Roll, wear, fail of rotation Breakage failure of Fuser drive gear Dirt or defect of REGI. Sensor	
008	176	Tray 1 Regi Sensor On Jam	Regi Sensor doesn' t become On though the specified time is passed after starting Tray1 Feed Slip of Tray 1 Feed Roll, wear, fail of rotation Clutch Assy PH(TRAY1) defects Dirt or defect of REGI. Sensors	
008	180	Dup Miss Feed Jam	Sensor DUP doen' t become ON when Duplex feeding. Slip of Feed Roll, wear, fail of rotation Dirt or defect of Sensor DUP	
008	314	I/F trouble between HVPS/MCU PWB-DM	Disconnect Duplex Unit after powering on Check the connection of Duplex Unit and machine	FIP1.27 (Separate volume) FIP1.32 (Separate volume)
009	413	Toner Black 1 Near Empty	Black Toner is almost empty. (No service work) Change drum/toner cartridge as needed.	
009	909	EP Cartridge Type Missmatch	ID in NVM of IOT machine and ID of drum/toner cartridge are different. Set the correct drum/toner cartridge.	FIP1.11
009	910	EP Cartridge Not Installed	The drum/toner cartridge is not set. Set the drum/toner cartridge correctly.	

Chain	Link	Fault Items	Conditions of detect/Methods of treatment	Ref FIP
010	105	Fuser Exit Sensor On Jam	Fuser Exit Sensor doesn' t detect paper from REGI. Clutch ON after specific time passed. Slip of Feed Roll, wear, fail of rotation Defect of Fuser Exit Sensor Disconnection of wires from Fuser Exit Sensor J4247-1 to MCU PWB J11-10 or loose connection	FIP1.7
010	106	Fuser Exit Sensor Off Jam	Paper doesn' t go through Fuser Exit Sensor though the specific time passed after REGI. Sensor go through. Check whether paper is not rolled to Heat Roll. Defect of Fuser Exit Sensor Short out the wires from Fuser Exit Sensor J159-1 to MCU PWB J15-B3.	FIP1.8
010	112	Exit Out Early Jam	Fuser Exit Sensor becomes OFF in shorter time than specified after Fuser Exit Sensor detected the top of paper. (Turning to OFF is too early.) Check whether paper is not rolled to Fuser Exit Roll.	FIP1.29 (Separate volume)
010	128	Duplex Pre Regi Sensor On Jam	Paper comes to Regi from Sensor DUP too fast. Dirt or defect of Sensor DUP	FIP1.28 (Separate volume)
010	132	Duplex Path 1 Sensor On Jam	Paper is not ejected from Sensor DUP within the specific time, or Sensor DUP is On while Warming up. Slip of Feed Roll, wear, fail of rotation, scrap of paper is left Dirt or defect of Sensor DUP	FIP1.29 (Separate volume)
010	164	Regi.SNR On Jam <Dup Miss Feed Jam>(not wait)	Paper doesn' t come to Reg from Sensor DUP within the specific time. Slip of Feed Roll, wear, fail of rotation Dirt or defect of Sensor DUP	FIP1.30 (Separate volume)
010	347	<OCT failure> Offset Fail (OCT)	Fail to communication with machineCheck the connection to the machine, and replace PWBA OCT if it is no problem.	FIP1.38 (Separate volume) FIP1.42 (Separate volume)
010	349	Fuser STS Front Disconnection Fail	Detect Fuser trouble. Replace Fuser Assy if Power OFF and ON cannot recover the FAIL.	FIP1.3
010	420	Fuser Unit Pre Warning	In the case that PV of Fuser comes to the specified value and the life time to be end. Replace Fuser Unit, and Reset HFSI counter.	FIP1.17
011	108	OCT Jam 1 (Paper doesn' t reach OCT)	Paper doesn' t come to OCT Sensor from Exit Sensor within the specific time. Slip of Feed Roll, wear, fail of rotationDirt or defect of Sensor OCT	FIP1.39 (Separate volume)
011	109	OCT Jam 2 (Paper is not ejected form OCT)	Paper is not ejected from OCT Sensor within the specific time, or OCT Sensor is On while Engine Warming up. Slip of Feed Roll, wear, fail of rotation Dirt or defect of Sensor OCT	
012	300	Faceup Tray is opened while printing.	Detect Cover Interlock Open of FaceUpTray in a job,or Standard mode,or Faceup Tray is opened while printing in OCT mode. Dirt or defect of Sensor Face Up Open	FIP1.43 (Separate volume)
012	951	OCT_FULL_STACK	Detect Full Stack(OCT) Detect paper left in the offset ejecting tray. Remove paper in IOT Face Down Tray. Dirt or defect of Sensor Full Stack	FIP1.41 (Separate volume) FIP1.44
012	952	FaceUP Tray Open	Detect that Faceup Tray is opened though printing out to Facedown Tray or OCT is specified. Dirt or defect of Sensor Face Up Open	FIP1.43 (Separate volume)

Chain	Link	Fault Items	Conditions of detect/Methods of treatment	Ref FIP
012	953	FaceUP Tray Close	Detect that Faceup Tray is closed though printing out to Faceup Tray is specified. Dirt or defect of Sensor Face Up Open	FIP1.43 (Separate volume)
012	969	IOT Center Tray Full	Detect paper left in the offset ejecting tray. Remove paper in IOT Face Down Tray. Dirt or defect of Sensor Full Stack	
016	450	Same SMB host name	The same host names of PCs exist on the network. Change host name.	-
016	452	Same IP address	The same IP address of PCs exist on the network. Check and change the IP address.	-
016	453	Fail to acquire IP DHCP server	Fail to acquire IP address from DHCP server. Set IP address. (Do not acquire from DHCP)	-
016	460	HDD Full	When accessing HD, Detect HDD Full status. Enter the Diag Program Hard Disk, and examine the trouble of DC355 Hard Disk.	-
016	500	SMTP Server Address Resolution Fail for Mail IO	SMTP server name is not correct. Set SMTP server name correctly or set by IP address.	-
016	501	POP Server Address Resolution Fail for Mail IO	POP3 server name is not correct. POP3 server name correctly or set by IP address.	-
016	502	POP Authentication Fail for Mail IO	The certification information (user name and password) of POP3 is not correct. Set the certification information (user name and password) of POP3.	-
016	503	SMTP Server Address Resolution Fail for Redirector	SMTP server name is not correct. Set SMTP server name correctly, or check the setting of DNS server.	-
016	504	POP Server Address Resolution Fail for Redirector	POP3 server name is not correct. POP3 server name correctly, or check the setting of DNS server.	-
016	505	POP Authentication Fail for Redirector	The certification information (user name and password) of POP3 is not correct. Set the certification information (user name and password) of POP3.	-
016	701	Out of Art EX Memory	Detect insufficient memory for PLW process when using ART EX. Print with low resolution if it is possible. (Print mode [normal])	-
016	702	Cannot Compress at all	Printing ART EX is not available due to the lack of print page buffer. Print with low resolution. (Print mode [normal])Add memory. Add print page buffer. Use page printing mode.	-
016	703	Email Received To Invalid Box	When receiving E-Mail, unopened or invalid personal box number is specified. Send e-mail to the valid personal box. Open the new personal box.	-
016	704	Mailbox is Full	Detect personal box full (it reaches the maximum number of messages in one box. (Job end) Delete unnecessary message, and start the job again.	-
016	705	Secure Print Storage without HD	Fail to resister the security print because HDD is not installed. Check that HDD is installed.	-
016	706	Max. User Number Exceeded	Over the maximum number of users of security/sample print.Delete unnecessary message and registered users of security print, and print again.	-
016	707	Sample Print Fail	Fail to register sample print because HDD is not installed or it is failure. Check that HDD is installed. Enter the Diag Program Hard Disk, and examine the trouble of DC355 Hard Disk.	-
016	709	ART EX Command Error	When processing PLW, ART EX command error causes. Cancel the job, and execute the job again.	-
016	710	Delayed Print Fail	Delete the condition to make impossible Delay Print.(Install HD and so on)	-

Chain	Link	Fault Items	Conditions of detect/Methods of treatment	Ref FIP
016	716	Unable to spool TIFF Data	Cannot spool TIFF file due to lack of memory. If HDD is not installed, install it. If it is installed, add the capacity.	-
016	721	Other Error	Unexpected error is caused when printing. Causes maybe as follows. 1. It is printed by auto tray selection while [Paper priority] is set to [no setting] for all paper types in the common menu [Printing settings]. 2.ESC/P command errorCheck printing data	-
016	726	PDL Auto Switch Fail	Printing language cannot be selected automatically when printing mode is set to [Auto]. Causes maybe as follows. 1. PostScript Data is sent without installing PostScript software.Install PostScript software kit. 2. PDF file is directly sent to the machine by using LPR while the internal HDD is not installed though PostScript software is installed. Install intertnal HDD. 3. Data of ART Ⅳ , 201H, ESC/P, HP-GL, or HP-GL/2 is sent with the printing mode [Auto] when ART Ⅳ /Emulation kit is not installed. Install ART Ⅳ / Emulation kit. (HP-GL and HP-GL/2 can be used by PostScript software kit.)	-
016	728	Unsupported TIFF Data	Unsupported tags are included in TIFF file. Check printing data.	-
016	729	TIFF Data Size is too Big	Color standards and resolution of TIFF data are specified over the valid range. Change Color standards and resolution of TIFF file, and print out again.	-
016	730	Unsupported ART Command	A command which is not supported by ART is detected. Check the printing data, delete the command to cause error, and indicate printing.	-
016	731	Invalid TIFF Data	TIFF data is not sufficient. Check the printing data, and indicate printing.	-
016	732	Data is not printed when the specified form is not registered in the <form composition error> emulation.	Decomposer detects that the specified form is not registered. Resend the form data.	-
016	744	Unsupported function is include in the sent PDF	When using PDF1.3, Transparency or JBIG2 is included in PDF file. Print out through a driver by using Acrobat Reader.	-
016	748	When accessing the personal box, detect FULL status and end the job	When accessing HD, detect FULL status and end the job. Make capacity of HD, and print again.	-
016	749	Detect <JCL/PJL syntax error> the syntax of JCL/ PJL command error	Detect syntax error of JCL/PJL command. Correct the command.	-
016	751	PDF Error	When processing PDF Bridge, errors such as syntax error, usage of undefined command, parameter error, breakage of PDF file, or internal error of PDF decomposer are caused. Open PDF file by using Adobe Acrobat Reader, and execute printing from [Print] under [File].	-
016	752	PDF Short of Memory	While processing PDF Bridge, detect lack of memory. If the Contents bridge is used, change the setting of [Print mode] in the [Contents Bridge] dialog box. If [High quality] is selected, change to [Normal]. If [Normal speed] is selected, change to [High speed].	-
016	753	PDF Password Mismatched	When processing PDF files protected by password, the password for UI panel setting and the password specified by XPJL (set by Contents Bridge Utility) are not identified. Set the correct password by a printer or Contents Bridge Utility, and execute printing again.	-

Chain	Link	Fault Items	Conditions of detect/Methods of treatment	Ref FIP
016	754	PDF LZW Not Installed	Without installing “Contents Bridge Extension kit”, the PDF file which is LZW compressed is processed by using PDF Bridge. Open PDF file by using Adobe Acrobat Reader, and execute printing from [Print] under [File]. Install Contents Bridge Extension kit.	-
016	755	PDF Print Prohibited	Print the PDF file which is specified not to print. Release the setting not to print the PDF file by using Adobe Acrobat, and execute printing again.	-
016	760	PS Decompose Error	When decomposing Post Script, an error is caused. Set [Print mode] to [High quality]. When it is not recovered yet, set to [Normal].Add print page buffer.Add PS use memory.	-
016	761	FIFO Empty ERR	Image extension error is caused. (FIFO Empty error) Set [Print mode] to [High quality, and execute printing again. When it is not recovered yet, set [page print mode] to [Yes].	-
016	762	Specified Decomposer Not Exist	Unimplemented functions (printing language, printing utility, and so on) are required. The printer can print ART EX, ART Ⅳ, 201H, ESC/P, HP-GL, HPGL/2, TIFF, and PDF data as standard. If sending PostScript is expected, please install the optional PostScript software kit.	-
016	796	Email Not Printed due to User Settings	When printing attached files only at receiving e-mail is set, the e-mail without attachment files is deleted. When printing the message of the e-mail and e-mail header is expected, change the setting on the property screen of CentreWare Internet Services.	-
016	797	Invalid Output Destination for Email Received	The address of the e-mail sent to this machine by using E-mail print faction is not correct. Specify the correct address, and resend the e-mail.	-
016	798	No TrustMarking Option	No HD error is returned when calling S-Image lib by Decomposer. Install the required Option(HD).	-
016	799	Print Instruction Fail detected in PLW	The combination of print parameters is not correct. [Tray paper size] of trays 1-4 are set to [Auto] on the operation panel, [Paper tray select] is set to [Auto], and print out in infinite form. Check the printing indication.	-
016	982	-	When accessing HDD, detect Full status. Detect the error that Full is not released even though it is waited for while. (No page can be stored.) After execute or delete the job (documents) in the same HDD partition, execute the operation again.	
103	203	Machine Code Fail	Machine Code is not set when shipping from the factory. After the shipment, the data of Machine Code, or MCU PWB and ESS PWB are replaced incorrectly. Execute DC132 Serial No matching. When it is not recovered yet, Replace ESS PWB or MCU PWB in order. (Replacing both of them simultaneously is impossible.)	
103	204	Serial No. Fail	Serial No. is not set when shipping from the factory. After the shipment, the data of Serial No., or MCU PWB and ESS PWB are replaced incorrectly. Execute DC132 Serial No matching. When it is not recovered yet, Replace ESS PWB or MCU PWB in order. (Replacing both of them simultaneously is impossible.)	
103	207	All Machine Codes Mismatch	At least one of Product Codes which are maintained in three points are wrong value. Execute DC132 Serial No matching. When it is not recovered yet, Replace ESS PWB or MCU PWB in order. (Replacing both of them simultaneously is impossible.)	

Chain	Link	Fault Items	Conditions of detect/Methods of treatment	Ref FIP
103	208	All Serial No. Mismatch	At least one of Serial No. which are maintained in three points become wrong value. Execute DC132 Serial No matching. When it is not recovered yet, Replace ESS PWB or MCU PWB in order. (Replacing both of them simultaneously is impossible.)	
103	320	SEEPROM Fail	Writing to SEEPROM on ESS PWB is not available. When it is not recovered by powering OFF and On, replace ESS PWB.	
103	321	Backup SRAM Fail	Writing to SRAM on ESS PWB is not available. When it is not recovered by powering OFF and On, replace ESS PWB.	
103	331	ESS ROM DIMM #1 Not Found	Extension ROM is not installed. (Option) Install extension ROM. If the trouble is not recovered by installing it, Replace ESS PWB.	
103	332	ESS Standard ROM Error	Detect standard ROM(On board) error. When it is not recovered by powering OFF and On, replace ESS PWB.	
103	333	ASIC Fail	Internal process error is caused within ESS PWB. When it is not recovered by powering OFF and On, replace ESS PWB.	
103	334	Standard Font ROM Error	Detect the trouble of ESS standard built in fonts ROM. When it is not recovered by powering OFF and On, replace ESS PWB.	
103	335	Font ROM Not Found	Font ROM is not built in. If only the standard font ROM is built in, Replace ESS PWB. If the option font ROM is installed, insert and remove theoption font ROM. When it is not recovered yet, replace the option font ROM.	
103	337	ESS Standard RAM Error	Detect the error of ESS standard built in RAM. When it is not recovered by powering OFF and On, replace ESS PWB.	
103	338	Same Font ROMs Found	Detect that the same font ROM is installed. Check the font ROM. If the trouble is not recovered, execute the followings. Replace ESS PWB.	
103	339	ROM DIMM of Another Product Found	Detect that the ROM for other machine is installed.	
103	372	IOT sc S/W Fail	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. Replace ESS PWB.	
103	373	IOT Manager software error	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. Replace ESS PWB.	
103	374	IOT IM DeviceDriver software error	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. Replace ESS PWB.	
116	200	Main PWB IC Fail	The trouble is caused to IC in ESS PWB. When it is not recovered by powering OFF and On, replace ESS PWB.	
116	201	HD Fail	HDD is not started because a physical trouble is caused to HDD when starting. When it is not recovered by powering OFF and On, execute the follownings. Execute HDD Test (DC355) Replace HDD Replace ESS PWB	
116	203	M/C is not started because a ProductCode trouble is caused to HDD when starting.	HDD is not started because a ProductCode trouble is caused to HDD when starting. The possibility that it is formatted by wring product M/C is high. Format HDD again. Replace HDD.	
116	204	M/C is not started because incorrect capacity of HDD is detected when formatting HDD.	HDD is formatted, but the incorrect HDD is connected or a trouble of HDD is caused. Format HDD again. Replace HDD.	

Chain	Link	Fault Items	Conditions of detect/Methods of treatment	Ref FIP
116	206	Timer Fail	Detect the trouble of timer in ESS PWB. When it is not recovered by powering OFF and On, replace ESS PWB.	
116	209	ESS Font ROM DIMM #1 Check Fail	When checking Font ROM 1, detect the trouble of Font ROM 1. Power off, and insert and remove the ROM. Replace the extension program & font ROM.	
116	310	ESS Font ROM DIMM #2 Check Fail	When checking Font ROM 2, detect the trouble of Font ROM 2. Power off, and insert and remove the ROM. Replace the extension program & font ROM.	
116	311	ESS Font ROM DIMM #3 Check Fail	When checking Font ROM 3, detect the trouble of Font ROM 3. Power off, and insert and remove the ROM. Replace the extension program & font ROM.	
116	314	Ethernet Address Fail	Detect the trouble of the Ethernet. When it is not recovered by powering OFF and On, replace ESS PWB	
116	315	ESS RAM DIMM #1 W/R Check Fail	When reading/writing ESS RAM 1, Detect the trouble of RAM. Insert and remove RAM1 of ESS PWB. When it is not recovered yet, replace RAM.	
116	317	Standard ROM DIMM Check Fail	When checking the standard ROM, detect the trouble of ROM. When it is not recovered by powering OFF and On, replace ESS PWB	
116	318	Option ROM DIMM Check Fail	When checking the option ROM, detect the trouble of ROM. Power off, and insert and remove the option ROM. When it is not recovered yet, Replace font ROM.	
116	320	S/W Fail	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. Replace ESS PWB.	
116	321	System S/W Fail	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. When it is not recovered by powering OFF and On, execute the followings. Check whether additional RAM is installed. Replace ESS PWB.	
116	323	ESS NVRAM W/R Check Fail	When checking reading/writing NVM of ESS PWB, detect an error.When it is not recovered by powering OFF and On, replace ESS PWB	
116	324	Exception Fail	The internal process error is caused in ESS PWB. When it is not recovered by powering OFF and On, replace ESS PWB	
116	326	ESS ROM DIMM #1 Flash Fail	When Reading/Writing ESS ROM1, detect the trouble of ROM. When it is not recovered by powering OFF and On, replace ESS PWB	
116	327	ESS ROM DIMM #2 Flash Fail	When Reading/Writing ESS ROM2, detect the trouble of ROM. When it is not recovered by powering OFF and On, replace ESS PWB	
116	328	L2 Cache Fail	The internal process error is caused in ESS PWB. When it is not recovered by powering OFF and On, replace ESS PWB	
116	330	HD File System Fail	When checking HDD with powering on, detect HDD error or HDD is not formatted. When it is not recovered by powering OFF and On, execute the followings. Execute HDD Test (DC355). Replace HDD Replace ESS PWB.	
116	332	Log incorrect	Detect the error of log. When it is not recovered by powering OFF and On, execute the followings. Remove HDD once, powering ON and OFF, install HDD, and powering on. Execute HDD Test (DC355) Replace ESS PWB.	
116	333	LocalTalk S/W Fail	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. Replace ESS PWB.	

Chain	Link	Fault Items	Conditions of detect/Methods of treatment	Ref FIP
116	340	Out of Memory	Lack of memory. When it is not recovered by powering OFF and On, execute the followings. Add memory. Remove PostScript (extension ROM).	
116	348	S/W Fail	The internal process error is caused in ESS PWB. When it is not recovered by powering OFF and On, replace ESS PWB	
116	349	Function Call Error	The internal process error is caused in ESS PWB. When it is not recovered by powering OFF and On, replace ESS PWB	
116	350	AppleTalk S/W Fail	The serious error of AppleTalk is caused. An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. Replace ESS PWB.	
116	351	EtherTalk S/W Fail	The serious error of EtherTalk is caused. An error is caused when processing the software, and the process cannot be continued after that. Replace ESS PWB.	
116	352	NetWare S/W Fail	The serious error of NetWare is caused. An error is caused when processing the software, and the process cannot be continued after that. Replace ESS PWB.	
116	353	lpd S/W Fail	The serious error of lpd is caused. An error is caused when processing the software, and the process cannot be continued after that. Replace ESS PWB.	
116	355	SNMP Agent S/W Fail	The serious error of SNMP Agent is caused. An error is caused when processing the software, and the process cannot be continued after that. Replace ESS PWB.	
116	356	EWS S/W Fail	The serious error of EWS is caused. An error is caused when processing the software, and the process cannot be continued after that. Replace ESS PWB.	
116	357	PS Fatal System S/W Fail	The serious error of PS Fatal System is caused. An error is caused when processing the software, and the process cannot be continued after that. Replace ESS PWB.	
116	358	Salutation S/W Fail	The serious error of Salutation is caused. An error is caused when processing the software, and the process cannot be continued after that. Replace ESS PWB.	
116	359	PLW S/W Fail	The serious error of PLW is caused. An error is caused when processing the software, and the process cannot be continued after that. Replace ESS PWB.	
116	360	SMB S/W Fail	The serious error of SMB is caused. An error is caused when processing the software, and the process cannot be continued after that. Replace ESS PWB.	
116	361	Spool HD Fatal Error	When accessing HDD, the serious error of HDD is caused. Powering OFF and ON, and if the trouble is not recovered yet, execute the followings. Execute the HDD defect test of DC355 Hard Disk Program. If it cannot resolve the trouble, replace HDD. When it is not recovered yet, Replace ESS PWB.	
116	362	SSDP Software Fail	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. Replace ESS PWB.	

Chain	Link	Fault Items	Conditions of detect/Methods of treatment	Ref FIP
116	363	BMLinkS/Print Service Software Fail	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. Replace ESS PWB.	
116	365	Spool Fatal Error	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. Replace ESS PWB.	
116	366	Print Utilityoperational falure	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. When it is not recovered by powering OFF and On, replace ESS PWB	
116	367	Parallel I/F S/W Fail	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. Replace ESS PWB.	
116	368	Dump Print Fatal Error	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. Replace ESS PWB.	
116	370	XJCL S/W Fail	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. Replace ESS PWB.	
116	371	PCL Decomposer S/W Fail	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. Replace ESS PWB.	
116	372	P-Formatter Fatal Error	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. When it is not recovered by powering OFF and On, replace ESS PWB	
116	373	Dynamic DNS Fatal Fail	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. Replace ESS PWB.	
116	374	Auto Switch Fail	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. Replace ESS PWB.	
116	376	Port 9100 S/W Fail	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. Replace ESS PWB.	
116	377	Video DMA Fail	The internal process error is caused in ESS PWB. When it is not recovered by powering OFF and On, replace ESS PWB	
116	378	MCR(Mail Contents Requester) S/W Fatal Fail	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. Replace ESS PWB.	
116	379	MCC(Mail Contents Creator)S/W Fatal Fail	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. Replace ESS PWB.	
116	385	IDC S/W Fail	An error is caused when processing the software in ESS PWB, and the process cannot be continued after that. Replace ESS PWB.	
116	388	When requiring HDD, HDD is not installed.	HDD is required to the configuration, but HDD is not installed. Check the connection of P310 on ESS PWB.	
116	389	When requiring additional RAM, the additional RAM is not installed.	Additional RAM is required to the configuration (with HDD), but the additional RAM is not installed. Check whether the additional RAM is installed completely.	
116	395	USB Fatal Error	The serious error of USB is caused. An error is caused when processing the software, and the process cannot be continued after that. Replace ESS PWB.	
116	396	Mail IO Fatal Error	The serious error of Mail IO is caused. An error is caused when processing the software, and the process cannot be continued after that. Replace ESS PWB.	

Chain	Link	Fault Items	Conditions of detect/Methods of treatment	Ref FIP
116	398	IPP S/W Fail	The serious error of IPP is caused. An error is caused when processing the software, and the process cannot be continued after that. Replace ESS PWB.	
116	399	JME S/W Fail	The serious error of JME is caused. An error is caused when processing the software, and the process cannot be continued after that. Replace ESS PWB.	
116	701	-	Duplex printing is not available due to lack of memory. Add memory. If HDD doesn' t exist, install HDD.	
116	703	PS Interpret Error	An error is caused to PostScript (option). Check the print data or spool setting.	
116	710	HP-GL Spool File Overflow	Correct document size is not judged because the received data is over the spool size of HP-GL and HP-GL2 Add the assign of HP-GL and HP-GL2 auto layout memory, or install HDD.	
116	711	PLW form composition error	Composing is not available because the drawing size and direction of PLW form is different from the paper size and direction. Select the paper which is the same size and direction as the registered form.	
116	712	Lack of PLW form capacity	When registering PLW form and logo data, it is not available to register due to lack of RAM or HDD. With referring the handling manual, delete unnecessary ones after checking the registered form and logos. Or add memory.	
116	714	HP-GL Command Error	HP-GL command error is caused. Check the print data, delete the command to cause the error, and execute printing again.	
116	715	PLW form registration error	When registering the form of PLW, it is not available to register due to the limitation of the number of registration. With referring the handling manual, delete unnecessary ones after checking the registered form. Or delete the unnecessary forms by the print command.	
116	718	PLW form composition error	The specified form is not registered. Use the registered form, or register the required form.	
116	720	PCL Memory Low	Lack of PCL memoryThe unnecessary port is not started. Or adjust buffer memory size. When it is not recovered yet, add memory.	
116	737	Lack of ART user definition	When registering the data of user definition (external character fonts, patterns, and so on) by ART, registering is not available due to lack of RAM capacity. Delete it after checking the registered user definition data. Or add memory size.	
116	738	Form composition error	Composing is not available because the drawing size and direction of form is different from the paper size and direction. Select the paper which is the same size and direction as the registered form.	
116	739	Lack of form and logo capacity	When registering PLW form and logo data, it is not available to register due to lack of RAM or HDD. With referring the handling manual, delete unnecessary ones after checking the registered form and logos. Or add memory.	
116	740	Numeric error	Numeric is over the limited value in interpreter. Delete the data because the value over the limit is used in printing data.	

Chain	Link	Fault Items	Conditions of detect/Methods of treatment	Ref FIP
116	741	Form registration error	When registering the form, it is not available to register due to the limitation of the number of registration. With referring the handling manual, delete unnecessary ones after checking the registered form. Or delete the unnecessary forms by the print command.	
116	742	Logo registration error	When registering the logo data, it is not available to register due to the limitation of the number of registration. With referring the handling manual, delete unnecessary ones after checking the registered logo. Or delete the unnecessary logos by the print command.	
116	743	Form/Logo size over flow	The received data (form /logo) is over te registered buffer size. With referring the handling manual, add the memory size of form registration area in the memory setting. Or install HDD.	
116	745	ART Command Error	An error is caused to ART command. Check the print data, delete the command to cause the error, and execute printing again.	
116	746	Form composition error	The specified form is not registered. Use the registered form, or register the required form.	

3. Level 2 FIP

3.1 Level 2 FIP

The Level 2 FIP is the trouble diagnostic procedure to be sorted based on the symptoms of various troubles. In the troubleshooting, executing the steps given in the FIP or checking procedure allows you to find out a cause of trouble in a short time.

4. Error Code FIP

4.1 Level 1 FIP

FIP1.1 NVM Error

Step	Check	Yes	No
	Possible causative parts: HVPS/MCU (PL12.1.19)		
1	Does Error occur when the power is turned ON?	Go to step 4.	Go to step 2.
2	Does Error still occur when the power is turned OFF and ON again?	Go to step 4.	Go to step 3.
3	Does Error still occur after several ON/OFF procedures of the power?	Go to step 4.	End of work *1
4	Checking HVPS/MCU non-volatile memory setup mode Is non-volatile memory setup mode accessible? Checks by Chapter 2 Diagnostic [DC301 NVM Initialize].	Go to step 5.	Replace HVPS/MCU. (RRP12.10)
5	Checking NVRAN for data setup Are all NVRAM data set appropriately? Checks by Chapter 2 Diagnostic [DC131 NVM Read/Write].	Go to step 7.	Go to step 6.
6	Checking Error after changing HVPS/MCU data setup Change NV RAM data to the correct setup value, and then turn the power ON again. Does Error still occur?	Replace HVPS/MCU, then go to step 7. (RRP12.10)	End of work
7	Checking after replacing HVPS/MCU Does Error occur?	Go to FIP2.19 Electrical Noise.	End of work

*1: Though some kind of foreign noise would be possible cause, go to [FIP2.19 Electrical Noise] and check, to make sure.

FIP1.2 ROS Error

Step	Check	Yes	No
	Possible causative parts: ROS ASSY (PL8.1.1) HVPS/MCU (PL12.1.19) EP CARTRIDGE HARNESS ASSY ROS (PL8.1.2) LVPS (PL12.1.5)		
1	Checking NVRAM for data setup value Are the value of 740-004 (resolution) and the value of 740-005 (Laser Diode output) set at the initial setup value in the factory? Checks by Chapter 2 Diagnostic [DC131 NVM Read/ Write].	Go to FIP2.3 ROS ASSY.	Set 740-004 and 740-005 to factory setup, and then check again. If Error still occurs, go to FIP2.3 ROS ASSY.

FIP1.3 FUSER Error

Step	Check	Yes	No
	Possible causative parts: FUSER ASSY (PL8.1.20) HVPS/MCU (PL12.1.19) LVPS (PL12.1.5) HARNESS ASSY FUSER (PL8.1.17) HARNESS ASSY LVPS (PL12.1.1)		
1	Checking the thermistor for operation Does Error occur soon after the power is turned ON? Error occurs as soon as the power is turned ON, or just after the time when a short warm up period elapsed.	Replace FUSER ASSY. (RRP8.8)	Go to FIP2.4 FUSER ASSY.

FIP1.4 FAN Error

Step	Check	Yes	No
	Possible causative parts: FAN MAIN (PL12.1.10) FAN SUB (PL8.1.5) LVPS (PL12.1.5) HVPS/MCU (PL12.1.19)		
1	Checking FAN MAIN for rotation (1) Does FAN MAIN rotate, when the power is turned ON?	Go to step 2.	Go to step 5.
2	Checking FAN SUB for rotation (1) Does FAN SUB rotate, when the power is turned ON?	Go to step 3.	Go to step 9.
3	Checking FAN MAIN for rotation (2) Does FAN MAIN rotate in high-speed? Checks by Chapter 2 Diagnostic [Fan Motor, High Speed Test].	Go to step 4.	Go to step 5.
4	Checking FAN SUB for rotation (2) Does FAN SUB rotate in high-speed? Checks by Chapter 2 Diagnostic [Fan Motor, High Speed Test].	Replace HVPS/ MCU, and watch FUN SUB for a while. (RRP12.10)	Go to step 9.
5	Checking the power to FAN MAIN Is FAN MAIN connected correctly, and is the voltage across P/J24-18 <=> P/J24-17, 24 VDC? (12 VDC, when half-speed)	Go to step 6.	Go to step 7.
6	Checking the FAN ALARM signal (1) Is the voltage across P/J24-17 <=> P/J24-16, 0.82 VDC or more?	Replace FAN MAIN. (RRP12.6)	Replace HVPS/MCU. (RRP12.10)
7	Checking after replacing FAN MAIN Replace the FAN MAIN. Does FAN Error occur when the power is turned ON?	Go to step 8.	End of work
8	Checking after replacing LVPS Replace the LVPS. Does FAN Error occur when the power is turned ON?	Replace HVPS/MCU. (RRP12.10)	End of work
9	Checking the power to FAN SUB Is FAN SUB connected correctly, and is the voltage across P/J27-19 <=> P/J27-18, 24 VDC? (12 VDC, when half-speed)	Go to step 10.	Go to step 11.
10	Checking the FAN ALARM signal Is the voltage across P/J27-18 <=> P/J27-17, 0.82 VDC or more?	Replace FAN SUB (RRP8.2)	Replace HVPS/MCU. (RRP12.10)
11	Checking after replacing FAN SUB Replace the FAN SUB. Does FAN Error occur when the power is turned ON?	Go to step 12.	End of work
12	Checking after replacing LVPS Replace the LVPS. Does FAN Error occur when the power is turned ON?	Replace HVPS/MCU. (RRP12.10)	End of work

FIP1.5 MAIN MOTOR Error

Step	**Check**	**Yes**	**No**
	Possible causative parts: MAIN MOTOR (PL11.1.2) GEAR ASSY HOUSING (PL11.1.3) GEAR ASSY PLATE (PL11.1.10) LVPS (PL12.1.5) HVPS/MCU (PL12.1.19)		
1	Checking MAIN MOTOR installation Are MAIN MOTOR, GEAR ASSY HOUSING and GEAR ASSY PLATE installed correctly?	With tool Go to step 2. Without tool Go to step 3.	Reinstall obstructive parts.
2	Checking MAIN MOTOR for operation Does the MAIN MOTOR rotate, and each gear rotate normally? Checks by Chapter 2 Diagnostic [Main Motor Test]. Remove COVER LEFT (PL1.1.6) to check.	Replace HVPS/MCU. (RRP12.10)	Go to step 3.
3	Checking GEAR ASSY HOUSING and GEAR ASSY PLATE for operation Does each gear rotate normally? Rotate and check each gear of GEAR ASSY HOUSING and GEAR ASSY PLATE.	Go to FIP2.2 MAIN MOTOR.	Replace the obstructive parts.

FIP1.6 Cover Error

Step	Check	Yes	No
	Possible causative parts: INTERLOCK S/W 24V (PL8.1.11) INTERLOCK S/W 5V (PL8.1.12) INTERLOCK S/W REAR (PL12.1.7) SWITCH I/L ASSY (PL1.1.11) COVER OPEN (PL1.1.2) HVPS/MCU (PL12.1.19) LVPS (PL12.1.5)		
1	Checking COVER OPEN and COVER REAR Are the tabs to push down INTERLOCK S/W 24V, 5V, and REAR, and SWITCH I/L ASSY damaged? Open COVER OPEN and COVER REAR to check.	Replace COVER OPEN or COVER REAR.	With tool Go to step 2. Without tool Go to FIP2.9,10,11, and 12 INTERLOCK S/W.
2	Checking INTERLOCK S/W 24V and 5V on function Does the number on Sensor/Switch Check increase by one, every time INTERLOCK S/W is pushed while pressing down the SWITCH I/L ASSY with a finger ? Checks by Chapter 2 Diagnostic [Sensor/Switch Check].	Go to step 3.	Go to FIP2.9 and 10 INTERLOCK S/W.
3	Checking INTERLOCK REAR on function Does the number on Sensor/Switch Check increase by one, every time INTERLOCK S/W REAR is pushed while pressing down the INTERLOCK S/W 24V with a finger ? Checks by Chapter 2 Diagnostic [Sensor/Switch Check].	Go to step 4.	Go to FIP2.11 INTERLOCK S/W.
4	Checking SWITCH I/L ASSY on function Does the number on Sensor/Switch Check increase by one, every time SWITCH I/L ASSY is pushed while pressing down both INTERLOCK S/W 24V and 5V with the finger ? Checks by Chapter 2 Diagnostic [Sensor/Switch Check].	Replace HVPS/MCU. (RRP12.10)	Go to FIP2.10 and 12 INTERLOCK S/W.

FIP1.7 Paper Jam/Regi to Fuser

Step	Check	Yes	No
	Possible causative parts: FUSER ASSY (PL8.1.20) HVPS/MCU (PL12.1.19) CLUTCH REGI (PL5.1.23) BTR ASSY (PL8.1.21) EP CARTRIDGE GEAR ASSY HOUSING (PL11.1.3) HARNESS ASSY FUSER (PL8.1.17) LVPS (PL12.1.5) 150 FEEDER ASSY (PL5.1.1) GUIDE ASSY CRU R (PL8.1.25)		
1	Checking the paper condition Is the paper in the tray crumpled or damaged?	Replace the paper with a new and dry one.	Go to step 2.
2	Checking paper size setup Does the paper size in use match the size setup by GUIDE ASSY END or by the Driver on the PC?	Go to step 3.	Replace the paper, or change the paper size set.
3	Checking paper position (1) Does the front end of paper touch with Actuator Exit in FUSER ASSY? Open COVER OPEN (PL1.1.2) to check.	Go to step 7.	Go to step 4.
4	Checking paper position (2) Does the front end of paper go through the Heat Roll / Pressure Roll in FUSER ASSY? Remove EP CARTRIDGE to check.	Replace HVPS/MCU. (RRP12.10)	Go to step 5.
5	Checking paper position (3) Does the front end of paper go through BTR ASSY?	Go to step 15.	Go to step 6.
6	Checking paper position (4) Does the front end of paper go between ROLL REGI METAL (PL5.1.34) and ROLL REGI RUBBER (PL5.1.12)?	Go to step 14.	Go to step 19.
7	Checking Actuator Exit for operation Does Actuator Exit move smoothly, when touching Actuator Exit with a finger inserted from the exit of FUSER ASSY, and moving it up and down? Remove EP CARTRIDGE to check.	With tool Go to step 8. Without tool Go to step 9	Replace FUSER ASSY. (RRP8.8)
8	Checking Exit Sensor for operation (1) Does the number of Sensor/Switch Check increase, every time Actuator Exit is pushed and released? Checks by Chapter 2 Diagnostic [Sensor /Switch Check]. Remove EP CARTRIDGE to check.	Replace HVPS/MCU. (RRP12.10)	Go to step 10.
9	Checking Exit Sensor for operation (2) Is the voltage across P/J46-5 <=> P/J46-4 on LVPS, 0VDC when Actuator Exit is pushed, and 3.3VDC when released? Remove EP CARTRIDGE to check.	Replace LVPS. (RRP12.3)	Go to step 10.

Step	Check	Yes	No
10	Checking HARNESS ASSY FUSER for continuity **Warning; Start the operation after the FUSER ASSY have cooled down.** Disconnect P/J46 from LVPS. Remove FUSER ASSY. (RRP8.8) Is P/J46 <=> P/J4647 continuous normally?	Go to step 11.	Replace HARNESS ASSY FUSER.
11	Checking the power to Exit Sensor Is the voltage across P/J46-3 <=> P/J46-4, 3.3 VDC?	Go to step 13.	Go to step 12.
12	Checking LVPS for continuity Is P/J41-1 <=> P/J46-3 continuous normally?	Go to FIP2.1 LVPS.	Replace LVPS. (RRP12.3)
13	Checking FUSER ASSY roll for operation **Warning; Start the operation after the FUSER ASSY have cooled down.** Remove FUSER ASSY. (RRP8.8) Do the gear and the roll of FUSER ASSY rotate smoothly? Turn the gear of the heater roller of FUSER ASSY with a finger to check.	Replace LVPS. (RRP12.3)	Replace FUSER ASSY. (RRP8.8)
14	Checking BTR ASSY for shape Remove BTR ASSY. (RRP8.10) Are there any abnormalities in BTR ASSY? Check the shape, shaft and Bearing BTR of BTR ASSY.	Go to step 15.	Replace BTR ASSY. (RRP8.10)
15	Checking GUIDE ASSY CRU R Is GUIDE ASSY CRU R damaged or stained?	Clean or replace GUIDE ASSY CRU R. (RRP8.13)	Go to step 16.
16	Checking GUIDE ASSY CRU R for continuity Remove GUIDE ASSY CRU R. (RRP8.13) Is each harness continuous?	Go to step 17.	Replace GUIDE ASSY CRU R. (RRP8.13)
17	Checking after replacing HVPS/MCU Replace HVPS/MCU. (RRP12.10) Carry out a test printing. Does the same trouble occur? Check by Chapter 2 Diagnostic [TEST PATTERN MODE MENU].	Go to step 18.	End of work
18	Checking after replacing EP CARTRIDGE Replace EP CARTRIDGE. Does the similar trouble occur, when the test printing is done? Checks by Chapter 2 Diagnostic [TEST PATTERN MODE MENU].	Go to step 19.	End of work
19	Checking ROLL REGI METAL (PL5.1.34) and ROLL REGI RUBBER (PL5.1.12) for operation Do ROLL REGI METAL and ROLL REGI RUBBER rotate smoothly? Turn ROLL REGI METAL and ROLL REGI RUBBER with a finger to check.	Go to step 20.	Replace 150 FEEDER ASSY. (RRP5.1)

Step	Check	Yes	No
20	Checking GLUTCH REGI for function Does CLUTCH REGI function appropriately? Checks by Chapter 2 Diagnostic [Regi. Roll Clutch Test].	Go to step 21.	Go to FIP2.15 CLUTCH REGI.
21	Checking GEAR ASSY HOUSING operation (1) Remove EP CARTRIDGE. Install COVER ASSY and close it. Does each gear rotate normally? Checks by Chapter 2 Diagnostic [Main Motor Test].	Replace HVPS/MCU. (RRP12.10)	Go to step 22.
22	Checking GEAR ASSY HOUSING operation (2) Does each gear rotate smoothly? Remove GEAR ASSY HOUSING to check. (RRP11.3)	Replace GEAR ASSY HOUSING. (RRP11.3)	Replace the trouble gear.

FIP1.8 Paper Jam/Exit

Step	Check	Yes	No
	Possible causative parts: FUSER ASSY (PL8.1.20) HVPS/MCU (PL12.1.19) HARNESS ASSY FUSER (PL8.1.17) MOTOR ASSY EXIT (PL10.1.15) LVPS (PL12.1.5) ROLL PINCH EXIT (PL10.1.23) CHUTE LW EXT2 ASSY (PL9.1.2) 500 EXIT ASSY (PL10.1.2) 150 PAPER CASSETTE (PL2.1.50) 250 PAPER CASSETTE (PL3.1.50) 550 PAPER CASSETTE (PL4.1.50)		
1	Checking the paper condition Is the paper crumpled, damaged or damp?	Replace the paper with a new and dry one.	Go to step 2.
2	Checking the paper size setup Does the paper size in use match the size setup by GUIDE ASSY END or by the driver on the PC?	Go to step 3.	Replace the paper, or set up the paper size correctly.
3	Does Error occur when the power is turned ON?	Go to step 4.	Go to step 6.
4	Checking the paper in Actuator Exit Is there any remaining paper in Actuator Exit?	Remove the paper, and go to step 5.	Go to step 8.
5	Does Error occur when the power is turned ON?	Go to step 8.	Go to step 6.
6	Carrying out a test printing Does Error occur? Checks by Chapter 2 Diagnostic [TEST PATTERN MODE MENU].	Go to step 7.	End of work
7	Checking ROLL PINCH EXIT Remove COVER TOP ASSY (PL1.1.7). (RRP1.4) Is ROLL PINCH EXIT not damaged, and rotating smoothly? Does SPRING PINCH EXIT attach? Turn ROLL EXIT with a finger to check.	Go to step 8.	Replace ROLL PINCH EXIT.
8	Checking ROLL EXIT (PL9.1.19) for rotation Remove EP CARTRIDGE. Close COVER OPEN (PL1.1.2). Turn the power ON. Does ROLL EXIT rotate smoothly during warm up?	Go to step 9.	Replace CHUTE LW EXT2 ASSY. (RRP9.1)
9	Checking Actuator Exit for operation Remove EP CARTRIDGE. Does Actuator Exit move smoothly, when touching Actuator Exit with a finger inserted from the exit of FUSER ASSY, and moving it up and down?	With tool Go to step 10. Without tool Go to step 11.	Replace FUSER ASSY. (RRP8.8)

Step	Check	Yes	No
10	Checking Exit Sensor for operation (1) Remove EP CARTRIDGE. Does the number of Sensor/Switch Check increase by one, every time Actuator Exit is pushed and released? Checks by Chapter 2 Diagnostic [Sensor/Switch Check].	Replace HVPS/MCU. (RRP12.10)	Go to step 11.
11	Checking Exit Sensor for operation (2) Remove EP CARTRIDGE. Is the voltage across P/J46-5 <=> P/J46-4 on LVPS, 0VDC when Actuator Exit is pushed, and 3.3VDC when released?	Go to step 14.	Go to step 12.
12	Checking the power to Exit Sensor Is the voltage across P/J46-3 <=> P/J46-4, 3.3VDC?	Replace LVPS. (RRP12.3)	Go to step 13.
13	Checking LVPS for continuity Is P/J41-1 <=> P/J46-3 continuous normally?	Go to FIP2.1 LVPS.	Replace LVPS. (RRP12.3)
14	Checking HARNESS ASSY LVPS for continuity Disconnect P/J11 on HVPS/MCU. Disconnect P/J41 on LVPS. Is J11-10 <=> J41-7 continuous normally?	Replace LVPS. (RRP12.3)	Replace HARNESS ASSY LVPS.

FIP1.9 Paper Jam/Tray to Regi

Step	Check	Yes	No
	Possible causative parts: 150 FEEDER ASSY (PL5.1.1) 150 PAPER CASSETTE (PL2.1.50) SENSOR REGI (PL5.1.30) ACTUATOR B (PL5.1.17) CHUTE ASSY FDR1 (PL5.1.3) HVPS/MCU (PL12.1.19) LVPS (PL12.1.5) CHUTE ASSY FDR2 (PL6.1.22, PL7.1.21, PL20.2.2) CLUTCH ASSY PH (PL5.1.21, PL6.1.21, PL7.1.20, PL20.2.21) ROLL ASSY RETARD (PL2.1.2, PL3.1.2, PL4.1.2, PL20.3.2) CLUTCH PR-REGI (PL20.2.22) 550 FEEDER OPION (PL20.2.1) 250 FEEDER ASSY (PL6.1.11) 250 PAPER CASSETTE (PL3.1.50) 550 FEEDER ASSY (PL7.1.10) 550 PAPER CASSETTE (PL4.1.50)		
1	Checking the paper size setup Does the paper size in use match the size setup by GUIDE ASSY END or by the driver on the PC?	Go to step 2.	Replace the paper, or change the paper size setup.
2	Does Error occur when the power is turned ON?	Go to step 3.	Go to step 5.
3	Checking the paper at ACTUATOR B Does the paper remain at ACTUATOR B of SENSOR REGI?	Remove the paper, and go to step 4.	Go to FIP2.5 SENSOR REGI.
4	Does Error occur when the power is turned ON?	Go to FIP2.5 SENSOR REGI.	Go to step 5.
5	Checking ROLL ASSY RETARD Is ROLL ASSY RETARD not damaged, and installed correctly? Check the operation of it assembled each Paper Cassette.	Go to step 6.	Replace ROLL ASSY RETARD (RRP2.1, 3.1, 4.1, 20.17)
6	Carrying out a test printing Does Error occur, when the test printing is done with the paper supplied from the Tray 1 or Tray 2? With the Option 550 Paper Feeder is installed, does Error occur, when the test printing is done with the paper supplied from the Tray 3 or Tray 4? Checks by Chapter 2 Diagnostic [TEST PATTERN MODE MENU].	Go to step 7.	End of work
7	Checking the paper position Remove EP CARTRIDGE. Does the front end of paper touch Actuator B of SENSOR REGI?	Go to step 8.	Go to FIP2.5 SENSOR REGI.

Step	Check	Yes	No
8	Checking a tray feeding the paper When test printing, is the paper supplied from Tray 1 or Tray 2?	With tool Go to step 9. Without tool Go to step 10.	Go to step 11.
9	Checking CLUTCH ASSY PH for operation Does CLUTCH ASSY PH operate normally? Checks by Chapter 2 Diagnostic [Tray1/2 Feed Clutch Test].	Go to step 11.	Go to FIP2.16 CLUTCH ASSY PH.
10	Checking CHUTE ASSY FDR1/2 (PL5.1.3, PL6.1.22, PL7.1.21) for operation Does each gear and roller of CHUTE ASSY FDR1/2 rotate smoothly? Turn each gear and roller with a finger to check.	Go to step 11.	Replace CHUTE ASSY FDR1/2.
11	Checking a paper feeding tray When test printing, is the paper supplied fromTray 3 or Tray 4?	With tool Go to step 12. Without tool Go to step 13.	Check if the paper is set, and then go to step 8.
12	Checking CLUTCH ASSY PH for operation Does CLUTCH ASSY PH operate normally? Checks by Chapter 2 Diagnostic [Option Tray1/2 Feed Clutch Test].	Go to step 14.	Go to FIP2.25 CLUTCH ASSY PH.
13	Checking 550 FEEDER OPTION for operation Does each gear and roller of 550 FEEDER OPTION rotate smoothly? Turn each gear and roller with a finger to check.	Go to step 15.	Replace Option 550 Paper Feeder.
14	Checking CLUTCH PR-REGI for operation Does CLUTCH PR-REGI operate normally? Checks by Chapter 2 Diagnostic [Option Feeder1/2 Turn Clutch Test].	Replace HVPS/MCU. (RRP12.10)	Go to FIP2.26 CLUTCH PR-REGI.
15	Checking ROLL PINCH TURN (PL20.2.14) for operation Does ROLL PINCH TURN rotate smoothly? Turn ROLL PINCH TURN with a finger to check.	Replace HVPS/MCU. (RRP12.10)	Replace ROLL ASSY TURN (RRP20.13).

FIP1.10 Paper Jam/Misfeed

Step	Check	Yes	No
	Possible causative parts: 150 FEEDER ASSY (PL5.1.1) 150 PAPER CASSETTE (PL2.1.50) SENSOR REGI (PL5.1.30) ACTUATOR B (PL5.1.17) LVPS (PL12.1.5) HVPS/MCU (PL12.1.19) CLUTCH REGI (PL5.1.23) CHUTE ASSY FDR1 (PL5.1.3) GEAR ASSY HOUSING (PL11.1.3) SENSOR NO PAPER (PL5.1.38, PL6.1.38, PL7.1.38, PL20.2.33) CHUTE ASSY FDR2 (PL6.1.22, PL7.1.21, PL20.2.2) PLATE ASSY BTM (PL2.1.10, PL3.1.10, PL4.1.10, PL20.3.10) ROLL ASSY RETARD (PL2.1.2, PL3.1.2, PL4.1.2, PL20.3.2) CLUTCH ASSY PH (PL5.1.21, PL6.1.21, PL7.1.20, PL20.2.21) ROLL ASSY TURN (PL20.2.14) CLUTCH PR-REGI (PL20.2.22) 250 FEEDER ASSY (PL6.1.11) 250 PAPER CASSETTE (PL3.1.50) 550 FEEDER ASSY (PL7.1.10) 550 PAPER CASSETTE (PL4.1.50)		
1	Does Error still occur, after removing all the jamming paper from the feeding tray?	Go to step 2.	Go to FIP1.14 Paper out / Tray 1, 2.
2	Checking paper condition Is the paper curled, damaged or damp?	Replace the paper with a new and dry one	Go to step 3.
3	Checking the paper size setup Does the paper size in use match the size setup by GUIDE ASSY END or by the driver on the PC?	Go to step 4.	Replace the paper, or set up the paper size correctly.
4	Checking PLATE ASSY BTM for operation Is PLATE ASSY BTM pushed up, and moved up and down smoothly, when installing Paper Cassette? Remove Paper Cassette. Check if PLATE ASSY BTM is pushed up, while installing Paper Cassette. Push PLATE ASSY BTM down and release, and check the movement. Check visually if PLATE ASSY BTM is incline to right or left.	Go to step 5.	Replace PLATE ASSY BTM. (RRP2.5, 3.5, 4.5, 20.21)

Step	Check	Yes	No
5	Is Side Guide tightening the paper too much?	Slightly widen the Side Guide, and run the paper again.	Go to step 6.
6	Checking GEAR ASSY HOUSING for rotation Remove EP CARTRIDGE. Does each gear of GEAR ASSY HOUSING rotate normally? Checks by Chapter 2 Diagnostic [Main Motor Test].	Go to step 7.	Check operation and mounting of GEAR ASSY HOUSING, and then go to FIP2.2 MAIN MOTOR.
7	Checking paper position Remove EP CARTRIDGE. Does the front end of paper touch ACTUATOR B of SENSOR REGI?	Go to step 8.	Go to FIP2.5 SENSOR REGI.
8	Checking ROLL ASSY RETARD Is ROLL ASSY RETARD clean and installed correctly? Check ROLL ASSY RETARD installed to each Paper Cassette.	Go to step 9.	Replace ROLL ASSY RETARD. (RRP2.1, 3.1, 4.1, 20.17)
9	Checking the paper feeding tray Is the paper for test printing supplied from Tray 1 or Tray 2?	With tool Go to step 10. Without tool Go to step 11.	Go to step 12.
10	Checking CLUTCH ASSY PH for operation Does CLUTCH ASSY PH operate normally? Checks by Chapter 2 Diagnostic [Tray1/2 Feed Clutch Test].	Go to step 12.	Go to FIP2.16 CLUTCH ASSY PH.
11	Checking CHUTE ASSY FDR1/2 for rotation Does each gear and roller of CHUTE ASSY FDR1/2 rotate smoothly? Turn each gear and roller with a finger to check.	Go to step 12.	Replace CHUTE ASSY FDR1/2.
12	Checking the paper feeding tray Is the paper for test printing supplied from Tray 3 or Tray 4?	With tool Go to step 13. Without tool Go to step 14.	Confirm that the paper is set, and then go to step 9.
13	Checking CLUTCH ASSY PH for operation Does CLUTCH ASSY PH operate normally? Checks by Chapter 2 Diagnostic [Option Tray1/2 Feed Clutch Test].	Go to step 15.	Go to FIP2.25 CLUTCH ASSY PH.
14	Checking 550 FEEDER OPTION for operation Does each gear and roller of 550 FEEDER OPTION rotate smoothly? Turn each gear and roller with a finger to check.	Go to step 16.	Replace 550 FEEDER OPTION. (RRP20.9)

Step	Check	Yes	No
15	Checking CLUTCH PR-REGI for operation Does Clutch PR-REGI operate normally? Checks by Chapter 2 Diagnostic [Option Feeder1/2 Turn Clutch Test].	Replace HVPS/MCU. (RRP12.10)	Go to FIP2.26 CLUTCH PR-REGI.
16	Checking ROLL ASSY TURN for rotation Does ROLL ASSY TURN rotate smoothly? Turn ROLL ASSY TURN with a finger to check.	Replace HVPS/MCU. (RRP12.10)	Replace ROLL ASSY TURN. (RRP20.13)

FIP1.11 EP CARTRIDGE

Step	Check	Yes	No
	Possible causative parts: HVPS/MCU (PL12.1.19) EP CARTRIDGE GUIDE ASSY CRU R (PL8.1.25)		
1	Checking EP CARTRIDGE (1) Is the EP CARTRIDGE appropriate model? Remove the EP CARTRIDGE to check the model.	Go to step 2.	Replace EP CARTRIDGE.
2	Checking EP CARTRIDGE (2) Install the EP CARTRIDGE again. Does STATUS 1-6 occur again when the power is turned ON?	Go to step 3.	End of work
3	Checking GUIDE ASSY CRU R Remove GUIDE ASSY CRU R. (RRP8.13) Is each harness continuous?	Go to step 4.	Replace GUIDE ASSY CRU R. (RRP8.13)
4	Checking EP CARTRIDGE (3) Replace the EP CARTRIDGE. Does Error occur again when the power is turned ON?	Replace HVPS/MCU. (RRP12.10)	End of work

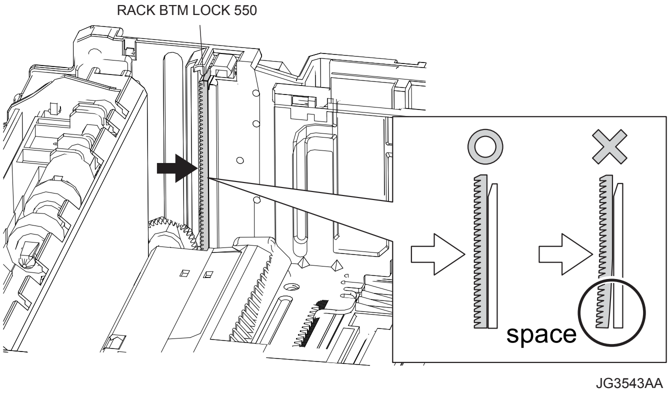
FIP1.12 Paper Size Error

Step	Check	Yes	No
	Possible causative parts: 150 FEEDER ASSY (PL5.1.1) 150 PAPER CASSETTE (PL2.1.50) SENSOR REGI (PL5.1.30) ACTUATOR B (PL5.1.17) HVPS/MCU (PL12.1.19) GUIDE TRAY LEFT (PL7.1.7) 250 FEEDER ASSY (PL6.1.11) 250 PAPER CASSETTE (PL3.1.50) 550 FEEDER ASSY (PL7.1.10) 550 PAPER CASSETTE (PL4.1.50)		
1	Checking the paper size setup Does the paper size in use match the size setup by GUIDE ASSY END or by the driver on the PC?	Go to step 2.	Replace the paper, or change the paper size setting.
2	Checking NVRAM data Does 740-002 Configuration 2 meet the specifications?	Go to step 3.	Modify the memory data.
3	Checking Regi Sensor Remove EP CARTRIDGE. Keep the lever of INTERLOCK S/W pushed as opening COVER OPEN (PL1.1.2). Does the number of Sensor/Switch Check increase one by one, when ACTUATOR B of SENSOR REGI is pushed and released? Checks by Chapter 2 Diagnostic [DC330 Component Control].	Go to step 4.	Go to FIP2.5 SENSOR REGI.
4	Checking the paper feeding tray Is the paper supplied from Tray 1 or Tray 2, when Error is occurred?	Go to step 5.	Go to step 6.
5	Checking Paper Cassette (1) Are GUIDE ASSY END, GEAR SECTOR, RACK SIZE, LINK SW SIZE1/2/3 of Paper Cassette of Tray 1 or Tray 2 installed correctly?	Go to FIP2.17 GUIDE TRAY LEFT.	Reinstall the parts causing Error.
6	Checking the paper tray Is the paper supplied from Tray 3 or Tray 4 when Error is occurred?	Go to step 7.	Replace HVPS/MCU. (RRP12.10)
7	Checking Paper Cassette (2) Are GUIDE ASSY END, GEAR SECTOR, RACK SIZE, LINK SW SIZE1/2/3 of Paper Cassette of Tray 3 or Tray 4 installed correctly?	Go to FIP2.24 OPT ASSY SIZE.	Reinstall the parts causing Error.

FIP1.13 No Tray/Tray 1, 2

Step	Check	Yes	No
	Possible causative parts: GUIDE TRAY LEFT (PL7.1.7) 150 PAPER CASSETTE (PL2.1.50) HVPS/MCU (PL12.1.19) 250 PAPER CASSETTE (PL3.1.50) 550 PAPER CASSETTE (PL4.1.50)		
1	Does Error occur with Tray 3 or Tray 4?	Go to FIP1.22 "No Tray/Tray 3.4".	Go to step 2.
2	Does Error still occur, after removing and reinserting the Paper Cassette of Tray 1 and Tray 2?	Go to step 3.	End of work
3	Checking Paper Cassette Are GUIDE ASSY END, GEAR SECTOR, RACK SIZE, LINK SW SIZE1/2/3 of Paper Cassette of Tray 1 or Tray 2 installed correctly?	Go to FIP2.17 GUIDE TRAY LEFT.	Reinstall the obstructive parts.

FIP1.14 No Paper/Tray 1, 2

Step	Check	Yes	No
	Possible causative parts: SENSOR NO PAPER (PL5.1.38, PL6.1.38, PL7.1.38) ACTUATOR NO PAPER (PL5.1.6, PL6.1.15, PL7.1.14) HVPS/MCU (PL12.1.19) LVPS (PL12.1.5) PLATE ASSY BTM (PL2.1.10, PL3.1.10, PL4.1.10) RACK BTM LOCK 550 (PL4.1.21) HOUSING BASE 550(PL4.1.44)		
1	Does Error Code indicate Tray 3 or Tray 4?	Go to FIP1.23 "No Paper/Tray 3, 4".	Go to step 2.
2	Checking if there is any paper Is there any paper in Tray 1 or Tray 2?	Go to step 3.	Supply paper.
3	Is PLATE ASSY BTM (PL2.1.10, PL3.1.10. PL4.1.10) lifted correctly?	Go to step 4.	Remove Paper Cassette, and then reinstall it correctly.
4	With pressing down PLATE ASSY BTM, press the center area of RACK BTM LOCK 550 against HOUSING BASE 550. Are RACK BTM LOCK 550 and HOUSING BASE 550 touched each other without any space? 	Go to step 5.	Work over the installation of RACK BTM LOCK 550 again.(RRP4.6)
5	Checking ACTUATOR NO PAPER for operation Remove Paper Cassette. When putting hand from the cassette insertion space to move ACTUATOR NO PAPER, does ACTUATOR NO PAPER move smoothly?	Go to step 6.	Replace ACTUATOR NO PAPER.
6	Checking SENSOR NO PAPER for operation Remove EP CARTRIDGE. Does number of Sensor/Switch Check increase by one, when ACTUATOR NO PAPER is pushed and released?. Checks by Chapter 2 Diagnostic [Sensor/Switch Check].	Replace HVPS/MCU. (RRP12.10)	Go to FIP2.6 SENSOR NO PAPER.

FIP1.15 Low Paper in Tray/Tray 2

Step	Check	Yes	No
	Possible causative parts: SENSOR LOW PAPER (PL6.1.4, PL7.1.4) ACTUATOR LOW PAPER (PL6.1.5, PL7.1.5) PLATE ASSY BTM (PL3.1.10, PL4.1.10) HVPS/MCU (PL12.1.19) 250 FEEDER ASSY (PL6.1.11) 250 PAPER CASSETTE (PL3.1.50) 550 PAPER CASSETTE (PL4.1.50) 550 FEEDER ASSY (PL7.1.10)		
1	Checking the sensor for operation Does Error still occur, after Paper Cassette filled with a specified amount of paper is inserted into Tray 2?	Go to step 2.	End of work
2	Checking ACTUATOR LOW PAPER for function Remove Paper Cassette. Does ACTUATOR LOW PAPER move smoothly, when moving ACTUATOR LOW PAPER up and down with a finger? Does ACTUATOR LOW PAPER go into the sensor part of SENSOR LOW PAPER, when the flag is pushed up? Does ACTUATOR LOW PAPER go out of the sensor part of SENSOR LOW PAPER, when the flag is released?	Go to step 3.	Replace ACTUATOR LOW PAPER.
3	Checking PLATE ASSY BTM for operation Does PLATE ASSY BTM move ACTUATOR LOW PAPER normally, when PLATE ASSY BTM is pushed or released?	Go to FIP2.7 SENSOR LOW PAPER.	Replace PLATE ASSY BTM. (RRP3.5, 4.5)

FIP1.16 Drum Life

Step	Check	Yes	No
	Possible causative parts: EP CARTRIDGE GUIDE ASSY CRU R (PL8.1.25) HVPS/MCU (PL12.1.19)		
1	Checking EP CARTRIDGE Does Error still occur, after installing a new EP CARTRIDGE?	Go to step 2.	End of work
2	Checking GUIDE ASSY CRU R for continuity Remove EP CARTRIDGE. Remove GUIDE ASSY CRU R. (RRP8.13) Is each cable of each harness continuous?	Replace HVPS/MCU. (RRP12.10)	Replace GUIDE ASSY CRU R. (RRP8.13)

FIP1.17 Fuser Life

Step	Check	Yes	No
	Possible causative parts: FUSER ASSY (PL8.1.20) HARNESS ASSY FUSER (PL8.1.17) HVPS/MCU (PL12.1.19)		
1	Checking FUSER ASSY Does Error still occur, after installing a new FUSER ASSY and sending RESET FUSER LIFE WARNING command? Checks by sending RESET FUSER LIFE WARNING Command from Controller section to MCU section of HVPS/MCU, using Chapter 2 Diagnostic [FUSER WARNING COUNT RESET].	Replace HVPS/MCU. (RRP12.10)	End of work

FIP1.18 No Power

Step	Check	Yes	No
	Possible causative parts: POWER CORD (PL12.1.23) LVPS (PL12.1.5) HVPS/MCU (PL12.1.19) OPERATION PANEL (PL1.1.1) HARNESS ASSY PANEL (PL1.1.10) INTERLOCK S/W 24V (PL8.1.11) INTERLOCK S/W 5V (PL8.1.12) INTERLOCK S/W REAR (PL12.1.7) FAN MAIN (PL12.1.10) FAN SUB (PL8.1.5) ROS ASSY (PL8.1.1) FUSER ASSY (PL8.1.20) GEAR ASSY HOUSING (PL11.1.3) MAIN MOTOR (PL11.1.2) CLUTCH REGI (PL5.1.23) PWBA ESS (PL12.1.13) PWBA FEEDER 550 (PL20.1.34) PWBA DUPLEX (PL21.1.32) CLUTCH ASSY PH (PL5.1.21, PL6.1.21, PL7.1.20, PL20.2.21) CLUTCH PR-REGI (PL20.2.22)		
1	Checking POWER CORD for continuity Is each cable of POWER CORD continuous?	Go to step 2.	Replace POWER CORD.
2	Checking AC power source Does the voltage of AC power source meet commercial voltage?	Go to step 3.	Ask the customer to arrange the AC power source.
3	Checking the fuse Remove SHIELD PLATE LVPS (PL12.1.3). (RRP12.1) Is the fuse on LVPS melt?	Replace LVPS. (RRP12.3)	Go to step 4.
4	Checking Option 550 Paper Feeder (PL20) Do two fans rotate, when the power is turned ON? Remove Option 550 Paper Feeder to check.	Go to FIP2.20,21 PWBA FEEDER 550, FIP2.25 CLUTCH ASSY PH, and FIP2.26 CLUTCH PR-REGI.	Go to step 5.
5	Checking Option Duplex (PL21) Do two fans rotate, when the power is turned ON? Remove Option Duplex to check.	Go to FIP2.27 PWBA DUPLEX, and FIP2.28 MOTOR DUPLEX.	Go to step 6.

Step	Check	Yes	No
6	Checking 24 V power line Remove SHIELD PLATE HVPS (PL12.1.18). Check if P/J10 is connected to HVPS/MCU. Remove EP CARTRIDGE. Check as follows, if each voltage is 24VDC. P/J10-1 <=> P/J10-4 P/J10-2 <=> P/J10-5 P/J10-3 <=> P/J10-6 P/J10-8 <=> P/J10-7	Go to step 7.	Go to FIP2.1 LVPS.
7	Checking CLUTCH REGI (PL5.1.23) Remove SHIELD PLATE HVPS (PL12.1.18). Disconnect P/J243. Remove EP CARTRIDGE. Does FAN MAIN rotate, when the power is turned ON?	Go to FIP2.15 CLUTCH REGI.	Go to step 8.
8	Checking OPERATION PANEL Disconnect HARNESS ASSY PANEL from PWBA ESS. Remove EP CARTRIDGE. Does FAN MAIN rotate, when the power is turned ON? Check with the wind from exhaust on back of the printer.	Go to step 9.	Go to step 10.
9	Checking HARNESS ASSY PANEL for continuity Disconnect HARNESS ASSY PANEL from PWBA ESS. Is there any open circuit or short circuit on the harness, and is every cable continuous?	Replace OPERATIONAL PANEL. (RRP1.4)	Replace HARNESS ASSY PANEL.
10	Checking ROS ASSY Disconnect P/J13, P/J14, P/J16 and P/J17 from HVPS/MCU. Remove EP CARTRIDGE. Does FAN MAIN rotate, when the power is turned ON?	Replace ROS ASSY. (RRP8.1)	Go to step 11.
11	Checking PWBA FEEDER Disconnect P/J20 from HVPS/MCU. Remove EP CARTRIDGE. Does FAN MAIN rotate, when the power is turned ON?	Replace PWBA FEEDER 550. (RRP20.8)	Go to step 12.
12	Checking INTERLOCK S/W Disconnect P/J44 and P/J45 from LVPS. Are the followings continuous when pushing the lever of INTERLOCK S/W, and not continuous when releasing? P/J44-1 <=> P/J44-3 P/J45-1 <=> P/J45-3	Go to step 13.	Replace INTERLOCK S/W. (RRP8.5, 12.5)
13	Checking SWITCH I/L ASSY Disconnect P/J411. Is it continuous between P/J411-2 <=> P/J411-1, when SWITCH I/L ASSY is pushed, and is not when released?	Go to step 14.	Replace SWITCH I/L ASSY. (RRP1.6)
14	Checking CLUTCH ASSY PH Disconnect P/J242 and P/J247 from HARNESS ASSY TRAY 1/2. Remove EP CARTRIDGE. Does the FAN MAIN rotate, when the power is turned ON?	Go to FIP2.16 CLUTCH ASSY PH.	Go to step 15.

Step	Check	Yes	No
15	Checking MAIN MOTOR Disconnect P/J43 from LVPS. Remove EP CARTRIDGE. Does FAN MAIN rotate, when the power is turned ON?	Go to FIP2.2 MAIN MOTOR.	Go to step 16.
16	Checking FAN MAIN Replace FAN MAIN. (RRP12.6) Remove EP CARTRIDGE. Does theFAN MAIN rotate, when the power is turned ON?	End of work	Go to step 17.
17	Checking FAN SUB Replace FAN SUB. (RRP8.2) Remove EP CARTRIDGE. Does theFAN SUB rotate, when the power is turned ON?	End of work	Replace HVPS/MCU. (RRP12.10)

FIP1.19 LCD/LED Display Error

Step	Check	Yes	No
	Possible causative parts: OPERATION PANEL (PL1.1.1) HARNESS ASSY PANEL (PL1.1.10) HVPS/MCU (PL12.1.19) LVPS (PL12.1.5)		
1	Checking 3.3VDC power line Is the voltage across the harness of OPERATION PANEL, 3.3 VDC?	Go to step 2.	Go to step 4
2	Checking OPERATION PANEL for continuity (1) Is every cable of HARNESS ASSY PANEL continuous?	Go to step 3.	Replace HARNESS ASSY PANEL.
3	Checking OPERATION PANEL (2) Is the display stable, after replacing OPERATION PANEL? (RRP1.4)	End of work	Replace HVPS/MCU. (RRP12.10)
4	Checking the power to OPERATION PANEL Is the voltage across P/J28-5 <=> P/J28-4 on HVPS/MCU, 3.3VDC?	Go to step 5.	Replace HVPS/MCU. (RRP12.10)
5	Checking FCC ASSY ESS for continuity Disconnect P/J28 from HVPS/MCU. Are the following continuous normally? P/J28-5 <=> P/J280-22 P/J28-4 <=> P/J280-23	Replace PWBA ESS. (PL12.1.13)	Replace FCC ASSY ESS. (PL12.1.16)

FIP1.20 Inoperative Keypad

Step	Check	Yes	No
	Possible causative parts: OPERATION PANEL (PL1.1.1) HARNESS ASSY PANEL (PL1.1.10) HVPS/MCU (PL12.1.19) LVPS (PL12.1.5)		
1	Checking 3.3 VDC power line Is the voltage across the harness of OPERATION PANEL, 3.3 VDC?	Go to step 2.	Go to step 4.
2	Checking OPERATION PANEL for continuity (1) Is every cable of HARNESS ASSY PANEL continuous?	Go to step 3.	Replace HARNESS ASSY PANEL.
3	Checking OPERATION PANEL (2) Is the display stable, after replacing OPERATION PANEL? (RRP1.4)	End of work	Replace HVPS/MCU. (RRP12.10)
4	Checking the power to OPERATION PANEL Is the voltage across P/J28-5 <=> P/J28-4 on HVPS/MCU, 3.3VDC?	Go to step 5.	Replace HVPS/MCU. (RRP12.10)
5	Checking FCC ASSY ESS for continuity Disconnect P/J28 from HVPS/MCU. Are the following continuous normally? P/J28-5 <=> P/J280-22 P/J28-4 <=> P/J280-23	Replace PWBA ESS. (PL12.1.13)	Replace FCC ASSY ESS. (PL12.1.16)

FIP1.21 Other Printer Error

Step	Check	Yes	No
	Possible causative parts: HVPS/MCU (PL12.1.19) LVPS (PL12.1.5)		
1	Carrying out a test printing Is the printer able to test print? Checks by Chapter 2 Diagnostic [TEST PATTERN MODE MENU].	Go to step 4.	Go to step 2.
2	Checking LVPS (1) Remove SHIELD PLATE LVPS. (RRP12.1) Remove EP CARTRIDGE. Is the voltage across P/J11-13 <=> P/J11-14 on HVPS/MCU, 5 VDC?	Go to step 3.	Go to FIP2.1 LVPS.
3	Checking LVPS (2) Remove EP CARTRIDGE. Is the voltage across P/J11-16 <=> P/J11-15 on HVPS/MCU, 3.3 VDC?	Replace HVPS/MCU. (RRP12.10)	Go to FIP2.1 LVPS.
4	Checking the test printing after installing EP CARTRIDGE. Is the printer reset?	Go to FIP2.19 Electrical Noise.	Go to step 5.
5	Checking Interface Cable Does the problem still occur, after replacing Interface Cable to connect the host with the printer?	Go to step 6.	End of work
6	Check after replacing HVPS/MCU Replace HVPS/MCU. (RRP12.10) Does the problem still occur, after replacing HVPS/MCU?	Let the customer know that possible cause may be in the host computer.	End of work

FIP1.44 Face Up Tray Error

Step	Check	Yes	No
	Possible causative parts: HVPS/MCU (PL12.1.19) SENSOR FACE UP OPEN (PL10.1.25) GATE FU (PL10.2.6) LEVER GATE FU (PL10.2.17)		
1	Checking Actuator for operation Does ACTUATOR FULL STACK in GATE FU move smoothly, when moving LEVER GATE FU up and down?	With tool Go to step 2. Without tool Go to step3.	Replace GATE FU.
2	Checking SENSOR FACE UP for operation Remove EP CARTRIDGE. Does the number of Sensor/Switch Check increase by one, every time moving LEVER GATE FU up and down? Checks by Chapter 2 Diagnostic [Sensor/Switch Check].	Go to step 3.	Go to FIP2.45 SENSOR FACE UP OPEN.
3	Checking SENSOR FACE UP OPEN for operation Replac SENSOR FACE UP OPEN. Does the problem still occur, after replacing SENSOR FACE UP OPEN?	Replace HVPS/MCU. (RRP12.10)	End of work

FIP1.45 Full Stack Error/500 Paper Exit

Step	Check	Yes	No
	Possible causative parts: SENSOR FULL STACK (PL10.1.26) ACTUATOR FULL STACK (PL10.1.10) HVPS/MCU (PL12.1.19)		
1	Checking ACTUATOR FULL STACK for operation Does ACTUATOR FULL STACK in paper feed out section move smoothly?	With tool Go to step 2. Without tool Go to step3.	Replace ACTUATOR FULL STACK.
2	Checking SENSOR FULL STACK for operation (1) Remove EP CARTRIDGE. Does the number of Sensor/Switch Check increase by one, every time pushing and releasing ACTUATOR FULL STACK? Checks by Chapter 2 Diagnostic [Sensor/Switch Check].	Go to step 3.	Go to FIP2.46 SENSOR FULL STACK.
3	Checking SENSOR FULL STACK for operation (2) Replace SENSOR FULL STACK. Does the problem still occur, after replacing SENSOR FULL STACK?	Replace HVPS/MCU. (RRP12.10)	End of work

4.2 Level 2 FIP

FIP2.1 LVPS (PL12.1.5)

Step	Check	Yes	No
	Possible causative parts: LVPS (PL12.1.5) HVPS/MCU (PL12.1.19) HARNESS ASSY LVPS (PL12.1.1)		
1	Checking LVPS (PL12.1.5) control power Remove SHIELD PLATE LVPS. (RRP12.1) Disconnect P/J41 from LVPS. Turn the power ON. Check the voltages below are in specified value. P/J41-1 <=> P/J41-2: 3.3 V P/J41-4 <=> P/J41-3: 5 V	Go to step 2.	Replace LVPS. (RRP12.3)
2	Checking LVPS driving power Disconnect P/J42 from LVPS. Turn the power ON. Is the voltage across P/J42-1 <=> P/J42-2, 24 VDC?	Go to step 3.	Go to FIP2.9 INTERLOCK S/W 24V, FIP2.11 INTERLOCK S/W REAR or FIP2.12 SWITCH I/L ASSY.
3	Checking HARNESS ASSY LVPS for continuity Turn the power OFF. Disconnect P/J11 from HVPS/MCU. Disconnect P/J41 from LVPS. Is each cable of J11 <=> J41 continuous?	Go to step 4.	Replace HARNESS ASSY LVPS.
4	Checking AC power source Is AC power supply outlet appropriately wired and earthed?	Replace HVPS/MCU. (RRP12.10)	Inform the client or the electrician.

FIP2.2 MAIN MOTOR (PL11.1.2)

Step	Check	Yes	No
	Possible causative parts: MAIN MOTOR (PL11.1.2) HARNESS ASSY LVPS (PL12.1.1) LVPS (PL12.1.5) HVPS/MCU (PL12.1.19)		
1	Checking MAIN MOTOR Remove EP CARTRIDGE. Close COVER OPEN (PL1.1.2). Does MAIN MOTOR rotate, when the power is turned ON? Check by rotation sound of MAIN MOTOR.	Go to step 2.	Go to step 3.
2	Is the trouble eliminated?	End of work	Go to step 3.
3	Checking HARNESS ASSY LVPS for continuity (1) Remove SHIELD PLATE LVPS. (RRP12.1) Disconnect P/J41 from LVPS. Disconnect P/J11 from HVPS/MCU. Is each cable of P/J41 <=> P/J11 continuous?	Go to step 4.	Replace HARNESS ASSY LVPS.
4	Checking HARNESS ASSY LVPS for continuity (2) Remove SHIELD PLATE LVPS. (RRP12.1) Disconnect P/J42 from LVPS. Disconnect P/J10 from HVPS/MCU. Is each cable of P/J42 <=> P/J10 continuous?	Go to step 5.	Replace HARNESS ASSY LVPS.
5	Checking LVPS Replace LVPS. (RRP12.3) Is the trouble eliminated?	End of work	Go to step 6.
6	Checking HVPS/MCU Replace HVPS/MCU. (RRP12.10) Is the trouble eliminated?	End of work	Replace MAIN MOTOR. (RRP11.2)

FIP2.3 ROS ASSY (PL8.1.1)

Step	Check	Yes	No
	Possible causative parts: ROS ASSY (PL8.1.1) HARNESS ASSY ROS (PL8.1.2) INTERLOCK S/W 5V (PL8.1.12) HARNESS ASSY LVPS (PL12.1.1) HVPS/MCU (PL12.1.19) LVPS (PL12.1.5)		
1	Checking the power to Laser Diode of ROS ASSY Remove COVER TOP ASSY (PL1.1.7). (RRP1.4) Disconnect P/J140 from ROS ASSY. Install EP CARTRIDGE. Close COVER OPEN (PL1.1.2). Is the voltage across J140-8 <=> J140-7, 5 VDC?	Go to step 8.	Go to step 2.
2	Checking INTERLOCK S/W 5V Remove INTERLOCK S/W 5V. Is it continuous between P/J142-1 <=> P/J142-3, when INTERLOCK S/W 5V is pushed, and is not when released?	Go to step 3.	Replace INTERLOCK S/W 5V. (RRP8.5)
3	Checking SWITCH I/L ASSY 5V Remove SWITCH I/L ASSY 5V. Is it continuous between P/J144-1 <=> P/J144-3, when SWITCH I/L ASSY 5 V is pushed, and is not when released?	Go to step 4.	Replace SWITCH I/L ASSY 5V. (RRP1.6)
4	Checking HARNESS ASSY LVPS Disconnect P/J141 of HARNESS ASSY LVPS. Is it conductive between P/J141-1 <=> P/J141-3 when INTERLOCK S/W 5V and SWITCH I/L ASSY 5V are pushed simultaneously, and is not when released?	Go to step 5.	Replace HARNESS ASSY LVPS.
5	Checking HARNESS ASSY ROS Disconnect P/J14 from HVPS/MCU. Disconnect P/J140 fcrom ROS ASSY. Is it continuous between P/J14-1 <=> P/J140-8, when INTERLOCK S/W 5V and SWITCH I/L ASSY 5V are pushed simultaneously, and is not when released?	Go to step 6.	Replace HARNESS ASSY ROS.
6	Checking power to HVPS/MCU Remove SHIELD PLATE LVPS. (RRP12.1) Install EP CARTRIDGE. Disconnect P/J41 from LVPS. Is the voltage across P/J41-4 <=> P/J41-3, 5 VDC?	Replace LVPS. (RRP12.3).	Go to step 7.
7	Checking HVPS/MCU for continuity Disconnect P/J14 and P/J11 from HVPS/MCU. Is P/J14-1 <=> P/J11-13 continuous normally?	Go to step 8.	Replace HVPS/MCU. (RRP12.10).
8	Checking HARNESS ASSY LVPS for continuity Disconnect P/J11 from HVPS/MCU. Is P/J11-13 <=> P/J41-4 continuous normally?	Go to step 9.	Replace HARNESS ASSY LVPS.

Step	Check	Yes	No
9	Checking /ROSMOT ON signal of Scanner Motor Install EP CARTRIDGE. Close COVER OPEN (PL1.1.2). Is P/J13-3 <=> P/J13-2 on HVPS/MCU, 0 V just after when the power is turned ON, and 5VDC 10 seconds after stopping MAIN MOTOR?	Go to step 11.	Go to step 10.
10	Checking HARNESS ASSY ROS for continuity Disconnect P/J13 from HVPS/MCU. Is each cable of P/J13 <=> P/J130 continuous?	Replace HVPS/MCU. (RRP12.10)	Replace HARNESS ASSY ROS.
11	Checking HARNESS ASSY ROS for continuity Disconnect P/J17 and P/J16 from HVPS/MCU. Disconnect P/J170 and P/J160 from ROS ASSY. Are the following continuous normally? P/J17 <=> P/J170 P/J16 <=> P/J160	Go to step 12.	Replace HARNESS ASSY ROS.
12	Checking SOS power circuit of ROS ASSY Disconnect P/J140 from ROS ASSY. Are the following continuous normally? P/J140-8 <=> P/J201-1 P/J140-6 <=> P/J201-2 P/J140-7 <=> P/J201-3	Go to step 13.	Replace ROS ASSY. (RRP8.1)
13	Checking after replacing HVPS/MCU Replace HVPS/MCU. (RRP12.10) Does the problem still occur, after replacement?	Go to step 14.	End of work
14	Checking after replacing ROS ASSY Replace ROS ASSY. (RRP8.1) Does the problem still occur, after replacement?	Go to FIP2.19 Electrical Noise.	End of work

FIP2.4 FUSER ASSY (PL8.1.20)

Step	Check	Yes	No
	Possible causative parts: FUSER ASSY (PL8.1.20) HVPS/MCU (PL12.1.19) INTERLOCK S/W 24V (PL8.1.11) HARNESS ASSY FUSER 100V/200V (PL8.1.17) HARNESS ASSY AC100V/200V (PL12.1.8) LVPS (PL12.1.5) HARNESS ASSY LVPS (PL12.1.1)		
1	Checking Heater circuit for continuity Remove SHIELD PLATE LVPS. (RRP12.1) Disconnect P/J47 from LVPS. Are the following continuous normally? J47-1 <=> J47-5 J47-1 <=> J47-3	Go to step 3.	Go to step 2.
2	Checking HARNESS ASSY FUSER for continuity Remove FUSER ASSY. (RRP8.8) **Warning; Start the operation after the FUSER ASSY have cooled down.** Are the following continuous normally? J4647B-3 <=> J47-1 J4647B-2 <=> J47-3 J4647B-1 <=> J47-5	Replace FUSER ASSY. (RRP8.8)	Replace HARNESS ASSY FUSER. (RRP8.7)
3	Checking Fuser power source voltage Disconnect P/J48 from LVPS. Remove EP CARTRIDGE. Turn the power to ON. Is the voltage across P/J48-1 <=> P/J48-3, commercial voltage?	Go to step 5.	Go to step 4.
4	Checking AC line voltage Is the AC line voltage the commercial voltage?	Replace HARNESS ASSY AC100V/200V (RRP12.4)	Inform the client or the electrician.
5	Checking Heater Rod ON signal voltage Make sure FUSER ASSY is cooled down. Make sure that EP CARTRIDGE is removed. Is the voltage across P/J41-13 and P/J41-12 <=> P/J41-3, 0VDC when Heater Rod lights on, and 3.3VDC when off?	Go to step 7.	Go to step 6.
6	Checking HARNESS ASSY LVPS for continuity Disconnect P/J11 from HVPS/MCU. Are the following continuous normally? P/J41-1 <=> P/J11-16 P/J41-9 <=> P/J11-8 P/J41-10 <=> P/J11-7 P/J41-12 <=> P/J11-5 P/J41-13 <=> P/J11-4	Replace HVPS/MCU. (RRP12.10)	Replace HARNESS ASSY LVPS.

Step	Check	Yes	No
7	Checking the resistance of Thermistor of Temperature Sensor Disconnect P/J46 from LVPS. Is the resistance between P/J46-6 <=> P/J46-7 and P/J46-1 <=> P/J46-2 about 480 k-ohm in the normal temperature (about 20 °C)?	Go to step 8.	Replace FUSER ASSY. (RRP8.8)
8	Checking after replacing HVPS/MCU Replace HVPS/MCU. (RRP12.10) Does the problem still occur after replacement?	Go to step 9.	End of work
9	Checking after replacing LVPS Replace LVPS. (RRP12.3) Does the problem still occur after replacement?	Replace FUSER ASSY. (RRP8.8)	End of work

FIP2.5 SENSOR REGI (PL5.1.30)

Step	Check	Yes	No
	Possible causative parts: SENSOR REGI (PL5.1.30) ACTUATOR B (PL5.1.17) 150 FEEDER ASSY (PL5.1.1) HARNESS ASSY TRAY1 (PL5.1.37) HARNESS ASSY CHUTE (PL12.1.17) HVPS/MCU (PL12.1.19) LVPS (PL12.1.5)		
1	Checking ACTUATOR B for operation and shape Remove 150 FEEDER ASSY. (RRP5.1) Does ACTUATOR B operate smoothly? Is the flag of ACTUATOR B formed normally to shield the Sensor detecting point? Check if the flag of ACTUATOR B is formed normally again, pushing ACTUATOR B by inserting a mini screwdriver from the paper entrance spacew at the lower and side sections each of 150 FEEDER ASSY.	With tool Go to step 2. Without tool Go to step 3.	Replace ACTUATOR B.
2	Checking SENSOR REGI (1) Connect the connector J241 of HARNESS ASSY TRAY1 to SENSOR REGI, with 150 FEEDER ASSY removed. Remove EP CARTRIDGE. Close COVER OPEN (PL1.1.2). Does the number of Sensor/Switch Check increase by one, by moving ACTUATOR B with a mini screwdriver? Checks by Chapter 2 Diagnostic [Sensor/Switch Check].	Replace HVPS/MCU. (RRP12.19)	Go to step 4.
3	Check SENSOR REGI (2) Connect the connector J241 of HARNESS ASSY TRAY1 to SENSOR REGI, with 150 FEEDER ASSY removed. Remove EP CARTRIDGE. Close COVER OPEN (PL1.1.2). Is the voltage across P/J24-11 <=> P/J24-10, 3.3 VDC when ACTUATOR B is pushed, and 0 VDC when released? Measure the voltage by moving ACTUATOR B with a mini screwdriver.	Replace HVPS/MCU. (RRP12.19)	Go to step 4.
4	Checking the power to SENSOR REGI Remove EP CARTRIDGE. Is the voltage across P/J24-9 <=> P/J24-10 on HVPS/MCU, about 3.3 VDC?	Go to step 5.	Go to step 7.
5	Checking HARNESS ASSY CHUTE for continuity Disconnect P/J24 from HVPS/MCU. Disconnect P/J245. Are the following continuous normally? J24-9 <=> J245-10 J24-10 <=> J245-9 J24-11 <=> J245-8	Go to step 6.	Replace HARNESS ASSY CHUTE.

Step	Check	Yes	No
6	Checking HARNESS ASSY TRAY1 for continuity Remove SENSOR REGI. (RRP5.7) Disconnect P/J245. Are the following continuous normally? P/J245-4 <=> P/J241-3 P/J245-5 <=> P/J241-2 P/J245-6 <=> P/J241-1	Go to step 8.	Replace HARNESS ASSY TRAY1.
7	Checking HVPS/MCU for continuity Disconnect P/J11 from HVPS/MCU. Is P/J11-16 <=> P/J24-9 continuous normally?	Go to FIP2.1 LVPS.	Replace HVPS/MCU. (RRP12.10)
8	Checking SENSOR REGI (3) Replace SENSOR REGI. (RRP5.7) Does the problem occur after replacement?	Replace HVPS/MCU. (RRP12.10)	End of work

FIP2.6 SENSOR NO PAPER (PL5.1.38, PL6.1.38, PL7.1.38)

Step	Check	Yes	No
	Possible causative parts: SENSOR NO PAPER (PL5.1.38, PL6.1.38, PL7.1.38) ACTUATOR NO PAPER (PL5.1.6, PL6.1.15, PL7.1.14) 150 FEEDER ASSY (PL5.1.1) HARNESS ASSY TRAY1 (PL5.1.37) HARNESS ASSY TRAY2 (PL6.1.36, PL7.1.36) HARNESS ASSY CHUTE (PL12.1.17) HVPS/MCU (PL12.1.19) PLATE ASSY BTM (PL2.1.10, PL3.1.10, PL4.1.10) LVPS (PL12.1.5) 250 FEEDER ASSY (PL6.1.11) 550 FEEDER ASSY (PL7.1.10)		
1	Checking ACTUATOR NO PAPER for shape and operation Does ACTUATOR NO PAPER operate smoothly? Is the flag between the sensor detecting point when ACTUATOR NO PAPER is low (there is no paper), and out of the detecting point when ACTUATOR NO PAPER is high (there is paper)?	Go to step 2.	Replace ACTUATOR NO PAPER.
2	Checking PLATE ASSY BTM Fit the empty Paper Cassette. Is the flag of ACTUATOR NO PAPER located in between sensor detecting point?	With tool Go to step 3. Without tool Go to step 4.	Replace PLATE ASSY BTM. (RRP2.5, 3.5, 4.5)
3	Checking SENSOR NO PAPER (1) Remove EP CARTRIDGE. Close COVER OPEN (PL1.1.2). Remove Paper Cassette. Put the hand from the tray insertion space, and move ACTUATOR NO PAPER up and down. Does the number increase one by one, as ACTUATOR NO PAPER operates? Checks by Chapter 2 Diagnostic [Sensor/Switch Check].	Replace HDVS/MCU. (RRP12.10)	Go to step 5.
4	Checking SENSOR NO PAPER (2) Remove EP CARTRIDGE. Close COVER OPEN (PL1.1.2). Remove Paper Cassette. Put the hand from the tray insertion space, move ACTUATOR NO PAPER up and down. Is each voltage across P/J24-8 <=> P/J24-7 and P/J24-3 <=> P/J24-2, 0VDC when ACTUATOR NO PAPER is moved up, 3.3VDC when down?	Replace HDVS/MCU. (RRP12.10)	Go to step 5.
5	Checking the power to SENSOR NO PAPER Remove EP CARTRIDGE. Is each voltage across P/J24-6 <=> P/J24-7 and P/J24-1 <=> P/J24-2 on HVPS/MCU, 3.3 VDC?	Go to step 6.	Go to step 8.

Step	Check	Yes	No
6	Checking HARNESS ASSY CHUTE for continuity Disconnect P/J24 from HVPS/MCU. Disconnect P/J245 and P/J248. Are the following continuous normally? J24-6 <=> J245-13 J24-7 <=> J245-12 J24-8 <=> J245-11 J24-1 <=> J248-5 J24-2 <=> J248-4 J24-3 <=> J248-3	Go to step 7.	Replace HARNESS ASSY CHUTE.
7	Checking HARNESS ASSY TRAY1 and HARNESS ASSY TRAY2 for continuity Remove SENSOR NO PAPER. Disconnect P/J24 from HVPS/MCU. Are the following continuous normally? P/J245-1 <=> P/J240-3 P/J245-2 <=> P/J240-2 P/J245-3 <=> P/J240-1 P/J248-1 <=> P/J246-3 P/J248-2 <=> P/J246-2 P/J248-3 <=> P/J246-1	Go to step 9.	Replace HARNESS ASSY TRAY1 or HARNESS ASSY TRAY2.
8	Checking HVPS/MCU for continuity Disconnect P/J11 from HVPS/MCU. Is P/J11-16 <=> P/J24-6 and P/J11-16 <=> P/J24-1 each continuous normally?	Go to FIP2.1 LVPS.	Replace HVPS/MCU. (RRP12.10)
9	Checking SENSOR NO PAPER (3) Replace SENSOR NO PAPER. (RRP5.8, 6.6, 7.6) Does the problem still occur, after replacement?	Replace HVPS/MCU. (RRP12.10)	End of work

FIP2.7 SENSOR LOW PAPER (PL6.1.4, PL7.1.4)

Step	Check	Yes	No
	Possible causative parts: SENSOR LOW PAPER (PL6.1.4, PL7.1.4) ACTUATOR LOW PAPER (PL6.1.5, PL7.1.5) PLATE ASSY BTM (PL3.1.10, PL4.1.10) HARNESS ASSY LOW1 (PL6.1.2, PL7.1.2) LVPS (PL12.1.5) HVPS/MCU (PL12.1.19)		
1	Checking ACTUATOR LOW PAPER for operation Install Paper Cassette. Does ACTUATOR LOE PAPER operate smoothly, when PLATE ASSY BTP is pushed and released by the hand? Does the flag go into the detection point of the sensor, when PLATE ASSY BTM is released (Actuator is pushed up), and out of the detection point, when pushed down?	With tool Go to step 2. Without tool Go to step 3.	Replace ACTUATOR LOW PAPER.
2	Checking SENSOR LOW PAPER for operation (1) Remove EP CARTRIDGE. Close COVER OPEN (PL1.1.2). Remove Paper Cassette. Put the hand in the tray insertin space, move ACTUATOR LOW PAPER. Does the number increase one by one, as ACTUATOR LOW PAPER moves? Checks by Chapter 2 Diagnostic [Sensor/Switch Check].	Replace HDVS/MCU. (RRP12.10)	Go to step 3.
3	Checking HARNESS ASSY LOW1 for continuity Remove HARNESS ASSY LOW1. Is J260 <=> J26 continuous normally?	Go to step 4.	Replace HARNESS ASSY LOW1.
4	Checking SENSOR LOW PAPER (2) Replace SENSOR LOW PAPER. (RRP6.9) Does the problem still occur, after replacement?	Replace HDVS/MCU. (RRP12.10)	End of work

FIP2.8 SENSOR TONER (PL5.1.46)

Step	Check	Yes	No
	Possible causative parts: SENSOR TONER (PL5.1.46) SENSOR TONER ASSY (PL5.1.45) HARNESS ASSY TONER1 (PL5.1.50) HARNESS ASSY TONER2 (PL12.1.28) EP CARTRIDGE HVPS/MCU (PL12.1.19)		
1	Checking EP CARTRIDGE (1) Does sufficient toner in EP CARTRIDGE remain?	Go to step 3.	Go to step 2.
2	Checking EP CARTRIDGE (2) Does the problem still occur, after replacing EP CARTRIDGE?	Go to step 3.	End of work
3	Checking SENSOR TONER ASSY installation Is SENSOR TONER ASSY installed correctly, and does HOLDER-D operate smoothly?	Go to step 4.	Replace SENSOR TONER ASSY.
4	Checking HARNESS ASSY TONER1 for continuity Remove HARNESS ASSY TONER1. Is J220 <=> J221 continuous normally?	Go to step 5.	Replace HARNESS ASSY TONER1.
5	Checking HARNESS ASSY TONER2 for continuity Remove HARNESS ASSY TONER2. Is J22 <=> J221 continuous normally?	Go to step 6.	Replace HARNESS ASSY TONER2.
6	Checking SENSOR TONER Replace SENSOR TONER. (RRP5.9) Does the problem still occur, after replacement?	Replace HVPS/MCU. (RRP12.10)	End of work

FIP2.9 INTERLOCK S/W 24V (PL8.1.11)

Step	Check	Yes	No
	Possible causative parts: INTERLOCK S/W 24V (PL8.1.11) LVPS (PL12.1.5) HVPS/MCU (PL12.1.19)		
1	Checking INTERLOCK S/W 24V Disconnect P/J45 from LVPS. Is P/J45-1 <=> P/J45-3 continuous, when INTERLOCK S/W 24V is pushed, and not when released?	Go to FIP2.1 LVPS.	Replace INTERLOCK S/W 24V. (RRP8.5)

FIP2.10 INTERLOCK S/W 5V (PL8.1.12), SWITCH I/L ASSY (PL1.1.11)

Step	Check	Yes	No
	Possible causative parts: INTERLOCK S/W 5V (PL8.1.12) SWITCH I/L ASSY (PL1.1.11) HARNESS ASSY ROS (PL8.1.2) HARNESS ASSY LVPS (PL12.1.1) LVPS (PL12.1.5) HVPS/MCU (PL12.1.19)		
1	Checking INTERLOCK S/W 5VL Remove INTERLOCK S/W 5VL. Is P/J142-1 <=> P/J142-3 continuous, when INTERLOCK S/W 5V is pushed, and not when released?	Go to step 2.	Replace INTERLOCK S/W 5VL. (RRP8.5)
2	Checking SWITCH I/L ASSY Remove INTERLOCK S/W 5VR. Is P/J144-1 <=> P/J144-3 continuous, when INTERLOCK S/W 5VR is pushed, and not when released?	Go to step 3.	Replace SWITCH I/L ASSY. (RRP1.6)
3	Checking HARNESS ASSY LVPS for continuity Disconnect P/J141, P/J142 and P/J144 of HARNESS ASSY LVPS. Are the following continuous normally? J141-3 <=> P142-1 J141-1 <=> P144-3 J142-3 <=> P144-1	Go to step 4.	Replace HARNESS ASSY LVPS.
4	Checking HARNESS ASSY ROS for continuity Disconnect P/J141, P/J14 and P/J140 of HARNESS ASSY ROS. Are the following continuous normally? P141-1 <=> J14-1 P141-3 <=> P140-8	Go to FIP2.1 LVPS.	Replace HARNESS ASSY ROS.

FIP2.11 INTERLOCK S/W REAR (PL12.1.7)

Step	**Check**	**Yes**	**No**
	Possible causative parts: INTERLOCK S/W REAR (PL12.1.7) LVPS (PL12.1.5) HVPS/MCU (PL12.1.19)		
1	Checking INTERLOCK S/W REAR for continuity Disconnect P/J44 from LVPS. Is P/J44-1 <=> P/J44-3 continuous, when INTERLOCK S/W REAR is pushed, and not when released?	Go to FIP2.1 LVPS.	Replace INTERLOCK S/W REAR. (RRP12.5)

FIP2.12 SWITCH I/L ASSY (PL1.1.11) (Interlock S/W Front R)

Step	Check	Yes	No
	Possible causative parts: SWITCH I/L ASSY (PL1.1.11) LVPS (PL12.1.5) HVPS/MCU (PL12.1.19)		
1	Checking SWITCH I/L ASSY for continuity Disconnect P/J411. Is P/J411-1 <=> P/J411-2 continuous, when SWITCH I/L ASSY is pushed, and not when released?	Go to step 2.	Replace SWITCH I/L ASSY. (RRP1.6)
2	Checking HARNESS ASSY LVPS for continuity Disconnect P/J11, P/J41 and P/J411. Are the following continuous normally? P411-2 <=> J41-5 P411-1 <=> J11-12	Go to FIP2.1 LVPS.	Replace HARNESS ASSY LVPS.

FIP2.13 PWBA EXIT MOTOR (PL12.1.4)

Step	Check	Yes	No
	Possible causative parts: PWBA EXIT MOTOR (PL12.1.4) HARNESS ASSY LVPS (PL12.1.1) LVPS (PL12.1.5) HVPS/MCU (PL12.1.19)		
1	Checking HARNESS ASSY LVPS for continuity Disconnect P/J27, P/J10, P/J102 and P/J101 from HARNESS ASSY LVPS. Are the following continuous normally? J27 <=> J102	Go to step 2.	Replace HARNESS ASSY LVPS.
2	Checking PWBA EXIT MOTOR power source voltage Disconnect P/J101 from PWBA EXIT MOTOR. Is the voltage across J101-2 <=> J101-1, 24 VDC?	Go to step 3.	Replace LVPS. (RRP12.3)
3	Checking PWBA EXIT MOTOR Replace PWBA EXIT MOTOR. (RRP12.2) Is the problem cleared, after replacement?	End of work	Replace HVPS/MCU. (RRP12.10)

FIP2.14 MOTOR ASSY EXIT (PL9.1.11, PL10.1.15)

Step	Check	Yes	No
	Possible causative parts: MOTOR ASSY EXIT (PL9.1.11, PL10.1.15) PWBA EXIT MOTOR (PL12.1.4) HARNESS ASSY LVPS (PL12.1.1) LVPS (PL12.1.5) HVPS/MCU (PL12.1.19)		
1	Checking MOTOR ASSY EXIT for operation Not using DIAG tool Replace MOTOR ASSY EXIT. (RRP9.2) Is the problem cleared, after replacement?	End of work	Go to step 3.
	Using DIAG tool Does the MOTOR ASSY EXIT rotate? Checks by Chapter 2 Diagnostic: [Exit Motor, Clockwise Test] [Exit Motor, Counterclockwise, High Speed Test] [Exit Motor, Counterclockwise, Low Speed Test]	End of work	Go to step2.
2	Checking MOTOR ASSY EXIT Replace MOTOR ASSY EXIT. (RRP9.2) Is the problem cleared, after replacement?	End of work.	Go to step 3.
3	Checking HARNESS ASSY LVPS for continuity Disconnect P/J27, P/J10, P/J102 and P/J101 from HARNESS ASSY LVPS. Are the following continuous normally? J27 <=> J102	Go to step 4.	Replace HARNESS ASSY LVPS.
4	CheckingMOTOR ASSY EXIT power source voltage Disconnect P/J101 from PWBA EXIT MOTOR. Is the voltage across J101-2 <=> J101-1, 24 VDC?	Go to step 5.	Replace LVPS. (RRP12.3)
5	Checking PWBA EXIT MOTOR Replace PWBA EXIT MOTOR. (RRP12.2) Is the problem cleared, after replacement?	End of work	Replace HVPS/MCU. (RRP12.10)

FIP2.15 CLUTCH REGI (PL5.1.23)

Step	Check	Yes	No
	Possible causative parts: CLUTCH REGI (PL5.1.23) HARNESS ASSY CHUTE (PL12.1.17) HARNESS ASSY TRAY1 (PL5.1.37) HVPS/MCU (PL12.1.19) LVPS (PL12.1.5)		
1	Checking HARNESS ASSY CHUTE for continuity Disconnect P/J24 from HVPS/MCU. Are the following continuous normally? J24-14 <=> J245-5 J24-15 <=> J245-4	Go to step 2.	Replace HARNESS ASSY CHUTE.
2	Checking HARNESS ASSY TRAY1 for continuity Remove CLUTCH REGI. Disconnect P/J245. Are the following continuous normally? P/J245-9 <=> P/J243-2 P/J245-10 <=> P/J243-1	Go to step 3.	Replace HARNESS ASSY TRAY1.
3	Checking the resistance of CLUTCH REGI Is the resistance of the wirewound resistor between P/J243-1 <=> P/J243-2 of CLUTCH REGI, 172 ohm +/- 10% (at 20 °C)?	Go to step 4.	Replace CLUTCH REGI. (RRP5.6)
4	Checking HVPS/MCU for continuity Disconnect P/J24 and P/J10 from HVPS/MCU. Is J24-14 <=> J10-1 continuous normally?	Go to FIP2.1 LVPS.	Replace HVPS/MCU. (RRP12.10)

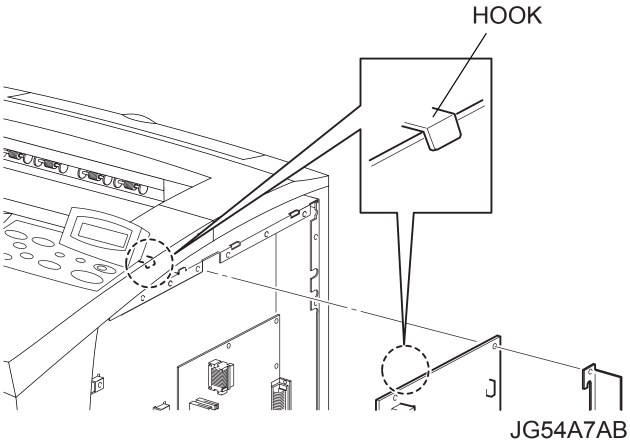
FIP2.16 CLUTCH ASSY PH (PL5.1.21, PL6.1.21, PL7.1.20)

Step	Check	Yes	No
	Possible causative parts: CLUTCH ASSY PH (PL5.1.21, PL6.1.21, PL7.1.20) HARNESS ASSY TRAY1 (PL5.1.37) HARNESS ASSY TRAY2 (PL6.1.36, PL7.1.36) HARNESS ASSY CHUTE (PL12.1.17) HVPS/MCU (PL12.1.19) LVPS (PL12.1.5)		
1	Checking HARNESS ASSY CHUTE for continuity Disconnect P/J24 from HVPS/MCU. Are the following continuous normally? J24-13 <=> J245-6 J24-12 <=> J245-7 J24-5 <=> J248-1 J24-4 <=> J248-2	Go to step 2.	Replace HARNESS ASSY CHUTE.
2	Checking HARNESS ASSY TRAY1 and TRAY2 for continuity Remove CLUTCH ASSY PH. Disconnect P/J245 or P/J248. Are the following continuous normally? P/J245-8 <=> P/J242-1 P/J245-7 <=> P/J242-2 P/J248-5 <=> P/J247-1 P/J248-4 <=> P/J247-2	Go to step 3.	Replace HARNESS ASSY TRAY1 or TRAY2.
3	Checking the resistance of CLUTCH ASSY PH Is each resistance of the wirewound resistor between P/J242-1 <=> P/J242-2, and P/J247-1 <=> P/J247-2 of CLUTCH ASSY PH, 172 ohm +/-10% (at 20 °C)?	Go to step 4.	Replace CLUTCH ASSY PH. (RRP5.6, 6.5, 7.5)
4	Checking HVPS/MCU for continuity Disconnect P/J24 and P/J10 from HVPS/MCU. Are the following continuous normally? J24-12 <=> J10-1 J24-4 <=> J10-1	Go to FIP2.1 LVPS.	Replace HVPS/MCU. (RRP12.10)

FIP2.17 GUIDE TRAY LEFT (PL7.1.7)

Step	Check	Yes	No
	Possible causative parts: GUIDE TRAY LEFT (PL7.1.7) HARNESS ASSY LVPS (PL12.1.1) HVPS/MCU (PL12.1.19) LVPS (PL12.1.5)		
1	Checking HARNESS ASSY LVPS for continuity Disconnect P/J18 from HVPS/MCU. Disconnect P/J1821. Is each cable between J18 <=> J1821 continuous?	Go to step 2.	Replace HARNESS ASSY LVPS.
2	Checking GUIDE TRAY LEFT for continuity Is each cable between Tray1 Size Switch <=> J1821, and Tray2 Size Switch <=> J1821 of GUIDE TRAY LEFT continuous?	Go to FIP2.18 HVPS/MCU.	Replace GUIDE TRAY LEFT. (RRP6.8, 7.8)

FIP2.18 HVPS/MCU (PL12.1.19)

Step	Check	Yes	No
	Possible causative parts: HVPS/MCU (PL12.1.19) GUIDE ASSY CRU R (PL8.1.25) EP CARTRIDGE HARNESS ASSY ANT (PL8.1.24) HARNESS ASSY LVPS (PL12.1.1)		
1	Checking the power by GUIDE ASSY CRU R Is GUIDE ASSY CRU R installed appropriately? Does the conducting part of GUIDE ASSY CRU R contact with the plate of HVPS/MCU and EP CARTRIDGE appropriately? Confirm whether HVPS/MCU is assembled under the hook of FRAME. 	Go to step 2.	Replace GUIDE ASSY CRU R. (RRP8.13) Work over the installation of HVPS/MCU again. (RRP12.10)
2	Checking GUIDE ASSY CRU R Remove GUIDE ASSY CRU R. (RRP8.13) Is the Plate Earth of GUIDE ASSY CRU R damaged or soiled?	Go to step 3.	Replace GUIDE ASSY CRU R. (RRP8.13)
3	Checking 24 V to HVPS/MCU Remove EP CARTRIDGE. Is the voltage across P/J10-1 <=> P/J10-4 on HVPS/MCU, 24 VDC?	Go to step 5.	Go to step 4.
4	Checking HARNESS ASSY LVPS for continuity Disconnect P/J10 from HVPS/MCU. Disconnect P/J42 from LVPS. Is P/J10 <=> P/J42 continuous normally?	Go to FIP2.1 LVPS.	Replace HARNESS ASSY LVPS.
5	Checking HARNESS ASSY ANT for continuity Disconnect P/J15 from HVPS/MCU. Is J15 <=> J150 continuous normally?	Replace HVPS/MCU. (RRP12.10)	Replace HARNESS ASSY ANT.

FIP2.19 Electrical Noise

Step	Check	Yes	No
	Possible causative parts: HVPS/MCU (PL12.1.19) GUIDE ASSY CRU R (PL8.1.25) FUSER ASSY (PL8.1.20) EP CARTRIDGE HARNESS ASSY ANT (PL8.1.24) HARNESS ASSY AC100V/200V (PL12.1.8) HARNESS ASSY LVPS (PL12.1.1) Option 550 Paper Feeder PWBA FEEDER 550 (PL20.1.34) PWBA DUPLEX (PL21.1.32)		
1	Checking a foreign noise Are there any other electrical appliances within 3 m of the printer, such as generators, radios and appliances with motors? Either turn off the other electrical appliances, or re-locate the printer at least 6 m from other appliances. Does the electrical noise problem still occur?	Go to step 2.	End of work
2	Checking AC ground Is AC power supply outlet wired and grounded appropriately?	Go to step 3.	Request the client to fix AC power supply outlet.
3	Checking HARNESS ASSY AC100V/200V Is the cable connected to HARNESS ASSY AC100V/200V appropriately grounded?	Go to step 4.	Install the ground screw appropriately.
4	Checking after replacing EP CARTRIDGE Replace EP CARTRIDGE. Does the electrical noise problem still occur, after replacement?	Go to step 5.	End of work
5	Checking GUIDE ASSY CRU R (1) Does the Plate Earth of GUIDE ASSY CRU R contact terminals on HVPS/MCU appropriately?	Go to step 6.	Replace GUIDE ASSY CRU R. (RRP8.13)
6	Checking GUIDE ASSY CRU R (2) Remove EP CARTRIDGE. Remove GUIDE ASSY CRU R. (RRP8.13) Is the Plate Earth of GUIDE ASSY CRU R normal and not damaged or soild, or there is no disturbing object?	Go to step 7.	Clean the plate or replace GUIDE ASSY CRU R. (RRP8.13)
7	Checking HARNESS ASSY ANT for continuity Disconnect P/J15 from HVPS/MCU. Is J15 <=> J150 continuous normally?	Go to step 8.	Replace HARNESS ASSY ANT.

Step	Check	Yes	No
8	Checking PWB ground Remove SHIELD PLATE LVPS (PL12.1.3) and SHIELD PLATE HVPS (PL12.1.8). (RRP12.1, 12.9) Is the ground normal? Are screws for ground of the following PWBs firmly tightened? All screws of HVPS/MCU (PL12.1.19) All screws of LVPS (PL12.1.5) When Option 550 Paper Feeder is installed: Are screws of PWBA FEEDER 550 firmly tightened? When Option Duplex is installed: Are screws of PWBA DUPLEX firmly tightened? When Option OCT is installed: Are screws of PWBA OCT firmly tightened?	Go to step 9.	Restore the inappropriate ground.
9	Checking after replacing FUSER ASSY **Warning; Start the operation after the FUSER ASSY have cooled down.** Replace FUSER ASSY. (RRP8.8) Does the problem still occur, after replacement?	Go to step 10.	End of work
10	Checking after replacing HVPS/MCU Replace HVPS/MCU. (RRP12.10) Does the problem still occur, after replacement?	Replace all related parts.	End of work

FIP2.44 MOTOR ASSY EXIT (PL10.1.15)

Step	Check	Yes	No
	Possible causative parts: MOTOR ASSY EXIT (PL10.1.15) HARNESS ASSY LVPS (PL12.1.1) PWBA EXIT MOTOR (PL12.1.4) HVPS/MCU (PL12.1.19) LVPS (PL12.1.5)		
1	Checking MOTOR ASSY EXIT. Not using DIAG tool: Replace MOTOR ASSY EXIT. (RRP10.5) Is the problem cleared?	End of work	Go to step 3.
	Using DIAG tool: Does the MOTOR ASSY EXIT rotate? Checks by Chapter 2 Diagnostic: [Exit Motor, Clockwise Test] [Exit Motor, Counterclockwise, High Speed Test] [Exit Motor, Counterclockwise, Low Speed Test]	End of work	Go to step 2.
2	Checking MOTOR ASSY EXIT Replace MOTOR ASSY EXIT. (RRP10.5) Is the problem cleared?	End of work	Go to step 3.
3	Checking HARNESS ASSY LVPS for continuity Disconnect P/J27, P/J10, P/J102 and P/J101 of HARNESS ASSY LVPS. Are the following continuous normally? J27 <=> J102	Go to step 4.	Replace HARNESS ASSY LVPS.
4	Checking the power to MOTOR ASSY EXIT Disconnect P/J101 from PWBA EXIT MOTOR. Is the voltage across J101-2 <=> J101-1, 24 VDC?	Go to step 5.	Replace LVPS. (RRP12.3)
5	Checking PWBA EXIT MOTOR Replace PWBA EXIT MOTOR. (RRP12.2) Is the problem cleared, after replacement?	End of work	Replace HVPS/MCU. (RRP12.10)

FIP2.45 SENSOR FACE UP OPEN (PL10.1.25)

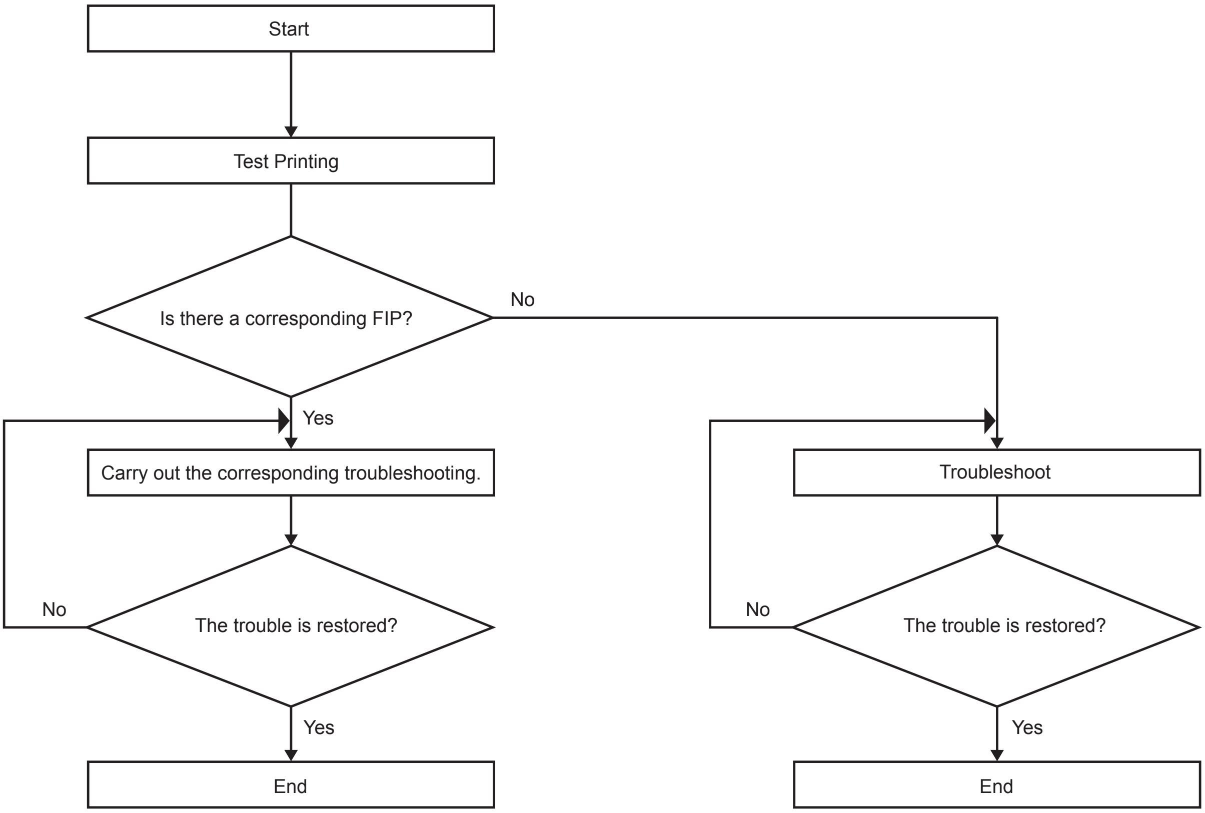
Step	Check	Yes	No
	Possible causative parts: SENSOR FACE UP OPEN (PL10.1.25) GATE FU (PL10.2.6) LEVER GATE FU (PL10.2.17) HARNESS ASSY EXIT SNR (PL10.1.27) HVPS/MCU (PL12.1.19)		
1	Checking GATE FU for operation Open COVER ASSY REAR 500. Move LEVER GATE FU up and down. Does GATE FU operate smoothly? Does the actuator go into the sensor detecting point when LEVER GATE FU is moved up, and out of the detecting point when down?	With tool Go to step 2. Without tool Go to step 3.	Replace LEVER GATE FU and GATE FU.
2	Checking SENSOR FACE UP OPEN for operation (1) Remove EP CARTRIDGE. Close COVER ASSY REAR 500. Move LEVER GATE FU up and down. Does the number increase one by one, every time LEVER GATE FU operates? Checks by Chapter 2 Diagnostic [Sensor/Switch Chec].	Replace HVPS/MCU. (RRP12.10)	Go to step 3.
3	Checking HARNESS ASSY EXIT SNR for continuity Remove 500 EXIT ASSY (PL10.1.2) (RRP10.2) Remove HARNESS ASSY EXIT SNR. Are the following continuous normally? J29-4 <=> J291-3 J29-5 <=> J291-2 J29-6 <=> J291-1	Go to step 4.	Replace HARNESS ASSY EXIT SNR.
4	Checking SENSOR FACE UP OPEN for operation Replace SENSOR FACE UP OPEN. (RRP10.6) Is the problem cleared?	End of work	Replace HVPS/MCU. (RRP12.10)

FIP2.46 SENSOR FULL STACK (PL10.1.26)

Step	Check	Yes	No
	Possible causative parts: SENSOR FULL STACK (PL10.1.26) ACTUATOR FULL STACK (PL10.1.10) HARNESS ASSY EXIT SNR (PL10.1.27) HVPS/MCU (PL12.1.19)		
1	Checking ACTUATOR FULL STACK Open COVER ASSY REAR 500. Move ACTUATOR FULL STACK with a finger. Does ACTUATOR FULL STACK operate smoothly? Does the flag go into the sensor detecting point when there is low paper, and out of the detecting point when full?	With tool Go to step 2. Without tool Go to step 3.	Replace ACTUATOR FULL STACK.
2	Checking SENSOR FULL STACK (1) Remove EP CARTRIDGE. Close COVER ASSY REAR 500. Move ACTUATOR FULL STACK up and down. Does the number increase one by one, every time ACTUATOR FULL STACK operates? Checks by Chapter 2 Diagnostic [Sensor/Switch Check].	Replace HVPS/MCU. (RRP12.10)	Go to step 3.
3	Checking HARNESS ASSY EXIT SNR for continuity Remove 500 EXIT ASSY (PL10.1.2) (RRP10.2) Remove HARNESS ASSY EXIT SNR. Are the following continuous normally? J29-1 <=> J290-3 J29-2 <=> J290-2 J29-3 <=> J290-1	Go to step 4.	Replace HARNESS ASSY EXIT SNR.
4	Checking SENSOR FULL STACK (2) Replace SENSOR FULL STACK. (RRP10.7) Is the problem cleared?	End of work	Replace HVPS/MCU. (RRP12.10)

5. Image Quality Trouble

5.1 Entry Chart for Image Quality Troubleshooting


Start
Test Printing
Is there a corresponding FIP?
No
Yes
Carry out the corresponding troubleshooting.
No
The trouble is restored?
Yes
End
Troubleshoot
No
The trouble is restored?
Yes
End

LPN702FA

NOTE

It is stated as the Printer Controller is normal. By operating test print with the engine only, if the trouble is on Printer Controller side or the engine side can simply be diagnosed, except those phenomena that are not able to be diagnosed by test print.

- Test print result with the engine only is normal. ---> Malfunction on Printer Controller side

- Test print result with the engine only is also abnormal. ---> Malfunction on the engine side

When it is the case of [Malfunction on Printer Controller side], replace with normal Printer Controller and normal Interface Cable, and check.

When the trouble still occurs after replacement, check the host side, and then operate Troubleshooting efficiently, using the following image quality FIP according to each phenomenon.

When the image quality trouble of print occurs, get a print to judge, understand and treat the trouble substance precisely and appropriately, and then troubleshoot efficiently, using the image quality FIP table according to each phenomenon.
When trouble restoration with image quality FIP is not possible, check again with the image quality FIP, and then replace [ESS and possible causative parts] in order and check, and operate Troubleshooting, using [Chapter 2 Diagnostic].

Image quality FIP states regarding the typical image quality trouble, as follows.

- FIP-1.P1	Faint print (Low contrast)
- FIP-1.P2	Blank print (No print)
- FIP-1.P3	Solid black
- FIP-1.P4	Vertical blank lines (White stripes in paper transport direction)
- FIP-1.P5	Horizontal band cross out
- FIP-1.P6	Vertical stripes
- FIP-1.P7	Horizontal stripes
- FIP-1.P8	Partial lack
- FIP-1.P9	Spots
- FIP-1.P10	Afterimage
- FIP-1.P11	Background (Fog)
- FIP-1.P12	Skew
- FIP-1.P13	Paper damage
- FIP-1.P14	No fix

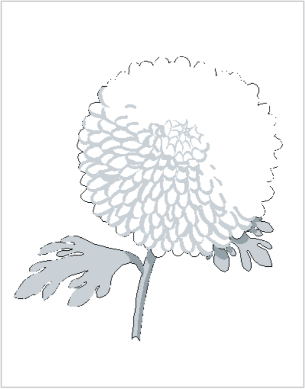
NOTE

When horizontal lines and/or spot occur periodically, it is possibly caused by the trouble of a particular roll. In this case, measure the trouble interval on the test print, and check the relation to the roll in the table below. The interval does not necessarily match circumference of the roll. The trouble may be solved easily by the check.

Roll	Parts name	PL No.	Roll diameter (mm)	Interval (mm)
Drum	EP CARTRIDGE	-	30.5	94.3
BTR	BTR ASSY	PL8.1	16.2	50.7
Heat Roll	FUSER ASSY	PL8.1	24.9	78.3
Pressure Roll	FUSER ASSY	PL9.1	30	94.2

5.2 Image Quality FIP

FIP-1.P1 Faint print (Low contrast)



SCO001F

Trouble substance
The density of the image is entirely too faint.

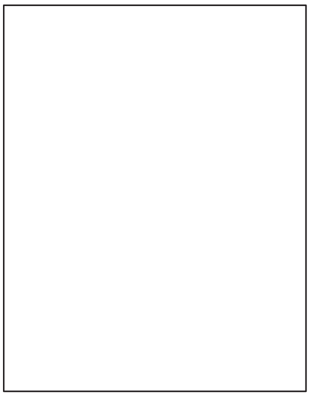
ESS and possible causative parts
- EP CARTRIDGE
- GUIDE ASSY CRU R (PL8.1.25)
- BTR ASSY (PL8.1.21)
- 150 FEEDER ASSY (PL5.1.1)
- PWBA ESS (PL12.1.13)
- ROS ASSY (PL8.1.1)
- FUSER ASSY (PL8.1.20)
- LVPS (PL12.1.5)
- HVPS/MCU (PL12.1.19)
- 250 FEEDER ASSY (PL6.1.11)
- 550 FEEDER ASSY (PL7.1.10)

Before commencing troubleshooting, check the paper transfer course. Make sure there is no foreign articles on the transfer course, such as staples, paper clips, scraps of paper and so on.

Step	Check	Yes	No
1	Checking the paper condition Have new, dry and recommended paper on, and operate Test Print. Is the density of the image normal?	End of work	Go to step 2.
2	Checking the laser beam course Make sure there is no obstacle between ROS ASSY and Drum. Check if any stains on ROS ASSY window. Are there any obstacles on the laser beam course? Is ROS ASSY window clean?	Go to step 3.	Remove obstacles and/or clean ROS ASSY window.
3	Checking EP CARTRIDGE Install a new EP CARTRIDGE. Re-print the problem image. Is the image density normal?	End of work	Go to step 4.
4	Checking BTR ASSY Remove BTR ASSY. (RRP8.10) Check if any stains and/or wear on BTR ASSY. Are there any stains and/or wear on BTR?	Go to step 5.	Replace BTR ASSY. (RRP8.10)
5	Checking the drum ground Remove GUIDE ASSY CRU R. (RRP8.13) Check the Plate Earth, located on the back of GUIDE ASSY CRU R. Is the Plate Earth stained and/or deformed?	Go to step 6.	Reform or clean the Plate Earth, or replace GUIDE ASSYCRU R. (RRP8.13)

Step	Check	Yes	No
6	Checking HVPS/MCU Replace HVPS/MCU. (RRP12.10) Carry out a test printing Is the problem cleared?	End of work	Go to step 7.
7	Checking the image development process Operate Test Print, and turn off the power of the printer while printing. Remove the EP CARTRIDGE with care, and check the toner image formed on the drum, right before the transcribe part (BTR). Is the image on the drum completely formed? Is the area clear and black, and easily read?	Go to step 8.	Go to FIP2.18 HVPS/MCU.
8	Checking the image transcribe process Check the toner image formed on the drum, right after the transcribe part (BTR). Is the toner image on the drum completely transcribed on the paper?	Go to step [ESS and possible causative parts].	Go to FIP2.18 HVPS/MCU.

FIP-1.P2 Blank print (No print)

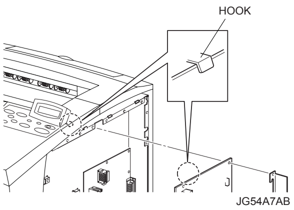


SCO002F

Trouble substance
The entire paper is printed pure white.

ESS and possible causative parts
- EP CARTRIDGE
- GUIDE ASSY CRU R (PL8.1.25)
- BTR ASSY (PL8.1.21)
- 150 FEEDER ASSY (PL5.1.1)
- ROS ASSY (PL8.1.1)
- PWBA ESS (PL12.1.13)
- FUSER ASSY (PL8.1.20)
- LVPS (PL12.1.5)
- HVPS/MCU (PL12.1.19)
- 250 FEEDER ASSY (PL6.1.11)
- 550 FEEDER ASSY (PL7.1.10)

Before commencing troubleshooting, check the paper transfer course. Make sure there is no foreign articles on the transfer course, such as staples, paper clips, scraps of paper and so on.

Step	Check	Yes	No
1	Confirm whether HVPS/MCU is assembled under the hook of FRAME. 	Go to step 2.	Work over the installation of HVPS/MCU again. (RRP12.10)
2	Checking the laser beam course Make sure there is no obstacle between ROS ASSY and Drum. Are there any obstacles on the laser beam course?	Go to step 3.	Remove obstacles.
3	Checking ROS ASSY Check if any obstacles entirely cover the ROS ASSY window. Check if the connectors of the ROS ASSY are disconnected.	Go to step 4.	Remove obstacles of ROS ASSY window and/or connect the connectors of ROS ASSY.
4	Checking EP CARTRIDGE Install a new EP CARTRIDGE. Re-print the problem image. Is the image density normal?	End of work	Go to step 5.
5	Checking BTR ASSY Remove BTR ASSY. (RRP8.10) Check if any stains and/or wear on BTR ASSY. Are there any stains and/or wear on BTR?	Go to step 6.	Replace BTR ASSY. (RRP8.10)

Step	Check	Yes	No
6	Checking the image development process Operate Test Print, and turn off the power of the printer while printing. Remove the EP CARTRIDGE with care, and check the toner image formed on the drum, right before the transcribe part (BTR). Is the image on the drum completely formed? Is the area clear and black, and easily read?	Go to step 7.	Go to FIP2.18 HVPS/MCU.
7	Checking the image transcribe process Check the toner image formed on the drum, right after the transcribe part (BTR). Is the toner image on the drum completely transcribed on the paper?	Go to step [ESS and possible causative parts].	Go to FIP2.18 HVPS/MCU.

FIP-1.P3 Solid black

SCO003F

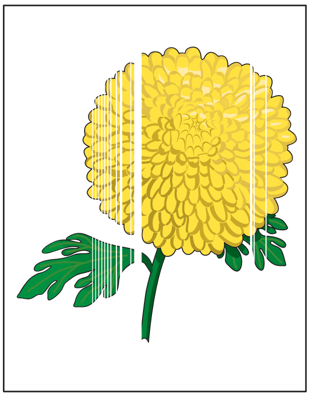
Trouble substance
The entire paper is printed jet-black.

ESS and possible causative parts
- EP CARTRIDGE
- HVPS/MCU (PL12.1.19)
- LVPS (PL12.1.5)
- 150 FEEDER ASSY (PL5.1.1)
- ROS ASSY (PL8.1.1)
- PWBA ESS (PL12.1.13)
- 250 FEEDER ASSY (PL6.1.11)
- 550 FEEDER ASSY (PL7.1.10)

Before commencing troubleshooting, check the paper transfer course. Make sure there is no foreign articles on the transfer course, such as staples, paper clips, scraps of paper and so on.

Step	Check	Yes	No
1	Checking EP CARTRIDGE Install a new EP CARTRIDGE. Carry out a test printing. Is the print normal?	End of work	Go to step 2.
2	Checking HVPS/MCU Cover entire ROS ASSY window. Carry out a test printing. Is the print black?	Go to FIP2.18 HVPS/MCU.	Go to step 3.
3	Checking ROS ASSY Cover a half of ROS ASSY window. Carry out a test printing. Is the print half white and half black? Is the print black?	Go to FIP2.3 ROS ASSY.	Replace HVPS/MCU. (RRP12.10)

FIP-1.P4 Vertical blank lines (White stripes in paper transport direction)



SCO004F

Trouble substance
There are some extremely faint or completely non-printed parts. Those non-printed parts cover a wide area vertically, along the paper feeding direction.

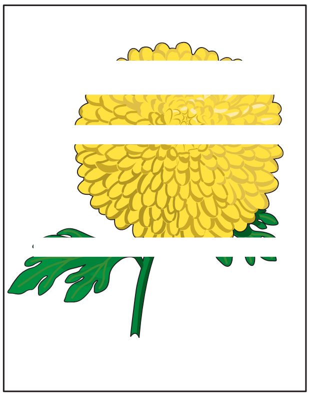
ESS and possible causative parts
- EP CARTRIDGE
- BTR ASSY (PL8.1.21)
- 150 FEEDER ASSY (PL5.1.1)
- ROS ASSY (PL8.1.1)
- PWBA ESS (PL12.1.13)
- FUSER ASSY (PL8.1.20)
- Heat Roll
- Pressure Roll
- 250 FEEDER ASSY (PL6.1.11)
- 550 FEEDER ASSY (PL7.1.10)

Before commencing troubleshooting, check the paper transfer course. Make sure there is no foreign articles on the transfer course, such as staples, paper clips, scraps of paper and so on.

Step	Check	Yes	No
1	Checking the paper condition Have new, dry and recommended paper on. Re-print the problem image. Does the problem still occur?	Go to step 2.	End of work
2	Checking the paper transfer course Check if there are any stains or obstacles on the paper transfer course between the paper feeding entrance and the exit. Are there any obstacles on the paper transfer course?	Go to step 3.	Remove the obstacles or stains from the paper transfer course.
3	Checking the laser beam course Make sure there is no obstacle between ROS ASSY and Drum. Are there any obstacles on the laser beam course? Check if any stains on ROS ASSY window.	Go to step 4.	Remove all the obstacles from the laser beam course and/or clean ROS ASSY window.
4	Checking EP CARTRIDGE Install a new EP CARTRIDGE. Re-print the problem image. Does the problem still occur?	Go to step 5.	End of work
5	Checking BTR ASSY (PL8.1.21) Remove BTR ASSY. (RRP8.10) Check if any stains and/or wear on BTR ASSY. Are there any stains and/or wear on BTR?	Go to step 6.	Replace BTR ASSY. (RRP8.10)

Step	Check	Yes	No
6	Checking Heat Roll and Pressure Roll Remove FUSER ASSY. (RRP8.8) **Warning; Start the operation after the FUSER ASSY have cooled down.** Turn the Gear HR with a finger, and check the Heat Roll and Pressure Roll. Are the Heat Roll and Pressure Roll damaged or stained?	Go to step [ESS and possible causative parts].	Replace FUSER ASSY. (RRP8.8)

FIP-1.P5 Horizontal band cross out



SCO005F

Trouble substance
There are some extremely faint or completely non-printed parts. Those non-printed parts cover a wide area horizontally, perpendicular to the paper feeding direction.

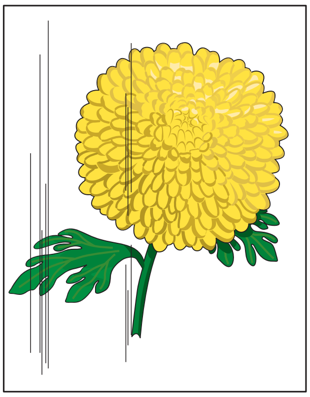
ESS and possible causative parts
- EP CARTRIDGE
- HVPS/MCU (PL12.1.19)
- GUIDE ASSY CRU R (PL8.1.25)
- BTR ASSY (PL8.1.21)
- 150 FEEDER ASSY (PL5.1.1)
- ROS ASSY (PL8.1.1)
- PWBA ESS (PL12.1.13)
- FUSER ASSY (PL8.1.20)
- Heat Roll
- Pressure Roll
- MAIN MOTOR (PL11.1.2)
- GEAR ASSY HOUSING (PL11.1.3)
- CLUTCH REGI (PL5.1.23)
- 250 FEEDER ASSY (PL6.1.11)
- 550 FEEDER ASSY (PL7.1.10)

Before commencing troubleshooting, check the paper transfer course. Make sure there is no foreign articles on the transfer course, such as staples, paper clips, scraps of paper and so on.

Step	Check	Yes	No
1	Checking the paper condition Have new, dry and recommended paper on. Re-print the problem image. Does the problem still occur?	Go to step 2.	End of work
2	Checking EP CARTRIDGE Install new EP CARTRIDGE. Has the horizontal band cross out gone?	End of work	Go to step3.
3	Checking BTR ASSY Remove BTR ASSY. (RRP8.10) Check if any stains and/or wear on BTR ASSY. Are there any stains and/or wear on BTR?	Go to step 4.	Replace BTR ASSY. (RRP8.10)
4	Checking ROS ASSY Are the connectors on ROS ASSY surely connected?	Go to step 5.	Reconnect the connectors.

Step	Check	Yes	No
5	Checking the image development process Operate Test Print, and turn off the power of the printer while printing. Remove the EP CARTRIDGE with care, and check the toner image formed on the drum, right before the transcribe part (BTR). Is the image on the drum completely formed? Is the area clear and black, and easily read? Has the horizontal band cross out gone?	Go to step 6.	Go to FIP2.18 HVPS/MCU.
6	Checking the image transcribe process Check the toner image formed on the drum, right after the transcribe part (BTR). Is the toner image on the drum completely transcribed on the paper?	Go to step 7.	Go to FIP2.18 HVPS/MCU.
7	Checking Drive Assy and GEAR ASSY HOUSING Replace Drive Assy and GEAR ASSY HOUSING. (RRP11.3) Re-print the problem image. Does the problem still occur?	Go to step 8.	End of work
7	Checking Heat Roll and Pressure Roll Remove FUSER ASSY. (RRP8.8) **Warning; Start the operation after the FUSER ASSY have cooled down.** Turn the Gear HR with a finger, and check the Heat Roll and Pressure Roll. Are the Heat Roll and Pressure Roll damaged or stained?	Go to step [ESS and possible causative parts].	Replace FUSER ASSY. (RRP8.8)

FIP-1.P6 Vertical stripes



SCO006F

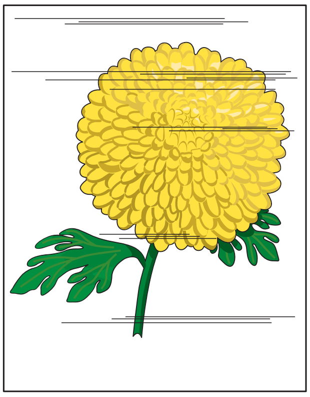
Trouble substance
There are vertical black stripes along the paper.

ESS and possible causative parts
- EP CARTRIDGE
- HVPS/MCU (PL12.1.19)
- GUIDE ASSY CRU R (PL8.1.25)
- BTR ASSY (PL8.1.21)
- 150 FEEDER ASSY (PL5.1.1)
- ROS ASSY (PL8.1.1)
- PWBA ESS (PL12.1.13)
- 250 FEEDER ASSY (PL6.1.11)
- 550 FEEDER ASSY (PL7.1.10)

Before commencing troubleshooting, check the paper transfer course. Make sure there is no foreign articles on the transfer course, such as staples, paper clips, scraps of paper and so on.

Step	Check	Yes	No
1	Check the paper transfer course. Check if there are any stains or obstacles on the paper transfer course between the paper feeding entrance and the exit. Are there any obstacles on the paper transfer course?	Go to step 2.	Remove the obstacles or stains from the paper transfer course.
2	Checking the laser beam course Make sure there is no obstacle between ROS ASSY and Drum. Are there any obstacles on the laser beam course? Check if any stains on ROS ASSY window.	Go to step 3.	Remove all the obstacles from the laser beam course and/or clean ROS ASSY window.
3	Checking EP CARTRIDGE Install a new EP CARTRIDGE. Carry out a test printing. Have the vertical black stripes gone?	End of work	Go to step 4.
4	Checking BTR ASSY Remove BTR ASSY. (RRP8.10) Check if any stains and/or wear on BTR ASSY. Are there any stains and/or wear on BTR?	Go to step 5.	Replace BTR ASSY. (RRP8.10)
5	Checking ROS ASSY Are the connectors on ROS ASSY surely connected?	Go to step 6.	Reconnect the connectors.
6	Checking Heat Roll and Pressure Roll Remove FUSER ASSY. (RRP8.8) **Warning; Start the operation after the FUSER ASSY have cooled down.** Turn the Gear HR with a finger, and check the Heat Roll and Pressure Roll. Are the Heat Roll and Pressure Roll damaged or stained?	Go to FIP2.19 Electrical Noise.	Replace FUSER ASSY. (RRP8.8)

FIP-1.P7 Horizontal stripes



SCO007F

Trouble substance
There are horizontal black stripes along the paper.

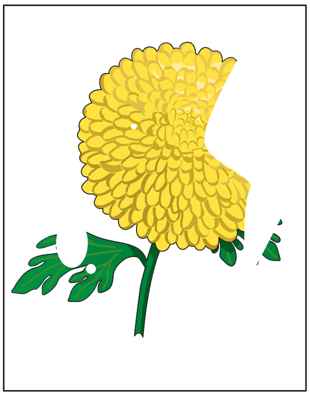
ESS and possible causative parts
- EP CARTRIDGE
- HVPS/MCU (PL12.1.19)
- GUIDE ASSY CRU R (PL8.1.25)
- BTR ASSY (PL8.1.21)
- 150 FEEDER ASSY (PL5.1.1)
- MAIN MOTOR (PL11.1.2)
- GEAR ASSY HOUSING (PL11.1.3)
- ROS ASSY (PL8.1.1)
- PWBA ESS (PL12.1.13)
- LVPS (PL12.1.5)
- 250 FEEDER ASSY (PL6.1.11)
- 550 FEEDER ASSY (PL7.1.10)

Before commencing troubleshooting, check the paper transfer course. Make sure there is no foreign articles on the transfer course, such as staples, paper clips, scraps of paper and so on.

Step	Check	Yes	No
1	Checking EP CARTRIDGE Install a new EP CARTRIDGE. Re-print the problem image. Have the horizontal black stripes gone?	End of work.	Go to step 2
2	Checking ROS ASSY Are the connectors on ROS ASSY surely connected? Is the ROS ASSY surely secured to the frame?	Go to step 3.	Reconnect the connectors and/or reinstall the ROS ASSY.
3	Checking Drive Assy and GEAR ASSY HOUSING Replace Drive Assy and GEAR ASSY HOUSING. (RRP11.3) Re-print the problem image. Does the problem still occur?	Go to step 4.	End of work
4	Checking GUIDE ASSU CRU R for continuity Remove EP CARTRIDGE. Check if there are any deformation or stains on the plate of GUIDE ASSY CRU R. Check the continuity of the plate of GUIDE ASSY CRU R. Are there any deformation or stains on the plate of GUIDE ASSY CRU R, and does it continuous?	Go to step 5.	Replace GUIDE ASSY CRU R. (RRP8.13)
5	Checking connection of GUIDE ASY CRU R Check the contact of the plate of GUIDE ASSY CRU R with the terminal on HVPS/MCU. Does the plate of GUIDE ASSY CRU R correctly contact with the terminal on HVPS/MCU?	Go to step 6.	Replace GUIDE ASSY CRU R. (RRP8.13)

Step	Check	Yes	No
6	Checking Drum ground Check the Plate Earth of GUIDE ASSY CRU R. Are there any stains or deformation on the Plate Earth?	Go to step 7.	Restore or clean the Plate Earth, or replace GUIDE ASSY CRU R. (RRP8.13)
7	Checking BTR ASSY Remove BTR ASSY. (RRP8.10) Check if any stains and/or wear on BTR ASSY. Are there any stains and/or wear on BTR?	Go to step 8.	Replace BTR ASSY. (RRP8.10)
8	Checking the image development process Operate Test Print, and turn off the power of the printer while printing. Remove the EP CARTRIDGE with care, and check the toner image formed on the drum, right before the transcribe part (BTR). Is the image on the drum completely formed? Is the area clear and black, and easily read?	Go to step 9.	Go to FIP2.18 HVPS/MCU.
9	Checking the image transcribe process Check the toner image formed on the drum, right after the transcribe part (BTR). Is the toner image on the drum completely transcribed on the paper?	Go to step 10.	Replace BTR ASSY. (RRP8.10)
10	Checking Heat Roll and Pressure Roll Remove FUSER ASSY. (RRP8.8) **Warning; Start the operation after the FUSER ASSY have cooled down.** Turn the Gear HR with a finger, and check the Heat Roll and Pressure Roll. Are the Heat Roll and Pressure Roll damaged or stained?	Go to step [ESS and possible causative parts].	Replace FUSER ASSY. (RRP8.8)

FIP-1.P8 Partial lack



SCO008F

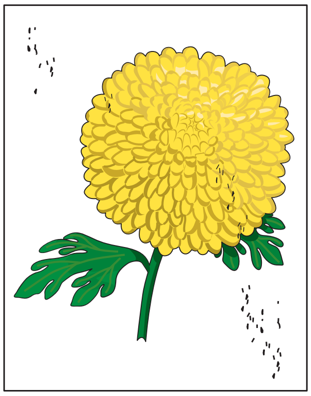
Trouble substance
There are some extremely faint or completely missing parts. Those missing parts are dotted in a limited area on the paper.

ESS and possible causative parts
- EP CARTRIDGE
- HVPS/MCU (PL12.1.19)
- BTR ASSY (PL8.1.21)
- 150 FEEDER ASSY (PL5.1.1)
- PWBA ESS (PL12.1.13)
- 250 FEEDER ASSY (PL6.1.11)
- 550 FEEDER ASSY (PL7.1.10)

Before commencing troubleshooting, check the paper transfer course. Make sure there is no foreign articles on the transfer course, such as staples, paper clips, scraps of paper and so on.

Step	Check	Yes	No
1	Checking the paper condition Have new, dry and recommended paper on. Re-print the problem image. Does the problem still occur?	Go to step 2.	End of work
2	Checking EP CARTRIDGE Install a new EP CARTRIDGE. Re-print the problem image. Does the problem still occur?	Go to step 3.	End of work
3	Checking the image development process Operate Test Print, and turn off the power of the printer while printing. Remove the EP CARTRIDGE with care, and check the toner image formed on the drum, right before the transcribe part (BTR). Is the image on the drum completely formed? Is the area clear and black, and easily read?	Go to step 4.	Go to FIP2.18 HVPS/MCU.
4	Checking the image transcribe process Check the toner image formed on the drum, right after the transcribe part (BTR). Is the toner image on the drum completely transcribed on the paper?	Go to step 5.	Replace BTR ASSY. (RRP8.10)
5	Checking Heat Roll and Pressure Roll Remove FUSER ASSY. (RRP8.8) **Warning; Start the operation after the FUSER ASSY have cooled down.** Turn the Gear HR with a finger, and check the Heat Roll and Pressure Roll. Are the Heat Roll and Pressure Roll damaged or stained?	Go to step [ESS and possible causative parts].	Replace FUSER ASSY. (RRP8.8)

FIP-1.P9 Spots



SCO009F

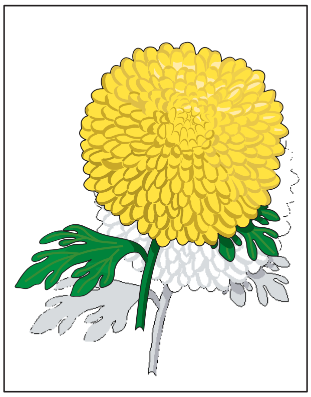
Trouble substance
There are toner spots all over the paper disorderedly.

ESS and possible causative parts
- EP CARTRIDGE
- HVPS/MCU (PL12.1.19)
- BTR ASSY (PL8.1.21)
- 150 FEEDER ASSY (PL5.1.1)
- ROS ASSY (PL8.1.1)
- GUIDE ASSY CRU R (PL8.1.25)
- PWBA ESS (PL12.1.13)
- 250 FEEDER ASSY (PL6.1.11)
- 550 FEEDER ASSY (PL7.1.10)

Before commencing troubleshooting, check the paper transfer course. Make sure there is no foreign articles on the transfer course, such as staples, paper clips, scraps of paper and so on.

Step	Check	Yes	No
1	Checking EP CARTRIDGE Install a new EP CARTRIDGE. Carry out a test printing. Have the spots gone?	End of work	Go to step 2.
2	Checking BTR ASSY Remove BTR ASSY. (RRP8.10) Check if any stains and/or wear on BTR ASSY. Are there any stains and/or wear on BTR?	Go to step 3.	Replace BTR ASSY. (RRP8.10)
3	Checking ROS ASSY Are the connectors on ROS ASSY surely connected?	Go to step 4.	Reconnect the connectors.
4	Checking the image development process Operate Test Print, and turn off the power of the printer while printing. Remove the EP CARTRIDGE with care, and check the toner image formed on the drum, right before the transcribe part (BTR). Is the image on the drum completely formed? Is the area clear and black, and easily read?	Go to step 5.	Go to FIP2.18 HVPS/MCU.
5	Checking Heat Roll and Pressure Roll Remove FUSER ASSY. (RRP8.8) **Warning; Start the operation after the FUSER ASSY have cooled down.** Turn the Gear HR with a finger, and check the Heat Roll and Pressure Roll. Are the Heat Roll and Pressure Roll damaged or stained?	Go to step [ESS and possible causative parts].	Replace FUSER ASSY. (RRP8.8)

FIP-1.P10 Afterimage



SCO010F

Trouble substance
The ghost appears on the paper. The ghost may be the image of the previous page, or a part of the page currently printing.

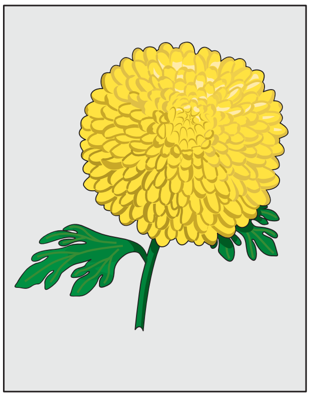
ESS and possible causative parts
- EP CARTRIDGE
- HVPS/MCU (PL12.1.19)
- GUIDE ASSY CRU R (PL8.1.25)
- Drive Assy
- BTR ASSY (PL8.1.21)
- 150 FEEDER ASSY (PL5.1.1)
- MAIN MOTOR (PL11.1.2)
- GEAR ASSY HOUSING (PL11.1.3)
- PWBA ESS (PL12.1.13)
- FUSER ASSY (PL8.1.20)
- Heat Roll
- Pressure Roll
- 250 FEEDER ASSY (PL6.1.11)
- 550 FEEDER ASSY (PL7.1.10)

Before commencing troubleshooting, check the paper transfer course. Make sure there is no foreign articles on the transfer course, such as staples, paper clips, scraps of paper and so on.

Step	Check	Yes	No
1	Checking repeat printing Check the afterimage. Is the client printing a copy of the same image in a large quantity?	Go to step 2.	Go to step 3.
2	Print 30 pages of the image of every kind. Does the afterimage still appear?	Go to step 3.	Don’t make a copy of the same image in a large quantity.
3	Checking the paper condition Have new, dry and recommended paper on. Re-print the problem image. Does the problem still occur?	Go to step 4.	End of work
4	Checking EP CARTRIDGE Install a new EP CARTRIDGE. Re-print the problem image. Does the problem still occur?	Go to step 5.	End of work
5	Checking BTR ASSY Remove BTR ASSY. (RRP8.10) Check if any stains and/or wear on BTR ASSY. Are there any stains and/or wear on BTR?	Go to step 6.	Replace BTR ASSY. (RRP8.10)

Step	Check	Yes	No
6	Checking Heat Roll and Pressure Roll Remove FUSER ASSY. (RRP8.8) **Warning; Start the operation after the FUSER ASSY have cooled down.** Turn the Gear HR with a finger, and check the Heat Roll and Pressure Roll. Are the Heat Roll and Pressure Roll damaged or stained?	Go to step 7.	Replace FUSER ASSY. (RRP8.8)
7	Checking ground of Heat Roll, Pressure Roll and Inlet Chute Check visually, if there are any stains or transformation on the two plates on the left side of FUSER ASSY. Check the continuity between the plate on the left side of FUSER ASSY and the following points. - Back plate <=> Both ends of Heat Roll, without coating (5-10 k-ohm) - Front plate <=> The plate on Inlet Chute left end (1-2 k-ohm) Are the grounding plates of Heat Roll, Pressure Roll and Inlet Chute sound and continuous?	Go to step 8.	Replace FUSER ASSY. (RRP8.8)
8	Checking ground of FUSER ASSY Remove EP CARTRIDGE. Check if there are any stains or deformation on GEAR ASSY HOUSING. Check the continuity between the printer frame and screw on the back of FUSER ASSY. Are there any deformation or stains on GEAR ASSY HOUSING? Is FUSER ASSY grounded?	Go to step [ESS and possible causative parts].	Replace GEAR ASSY HOUSING. (RRP11.3)

FIP-1.P11 Background (Fog)



SCO011F

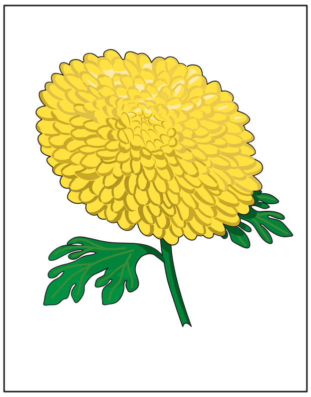
Trouble substance
There is toner stain all over or a part of the page. The stain appears as very bright gray stain.

ESS and possible causative parts
- EP CARTRIDGE
- BTR ASSY (PL8.1.21)
- HVPS/MCU (PL12.1.19)
- GUIDE ASSY CRU R (PL8.1.25)
- ROS ASSY (PL8.1.1)
- PWBA ESS (PL12.1.13)
- 150 FEEDER ASSY (PL5.1.1)
- FUSER ASSY (PL8.1.20)
- 250 FEEDEER ASSY (PL6.1.11)
- 550 FEEDER ASSY (PL7.1.10)

Before commencing troubleshooting, check the paper transfer course. Make sure there is no foreign articles on the transfer course, such as staples, paper clips, scraps of paper and so on.

Step	Check	Yes	No
1	Checking EP CARTRIDGE Install a new EP CARTRIDGE. Carry out a test printing. Have the background gone?	End of work	Go to step 2.
2	Checking the image development process Operate Test Print, and turn off the power of the printer while printing. Remove the EP CARTRIDGE with care, and check the toner image formed on the drum, right before the transcribe part (BTR). Is the image on the drum completely formed? Is the area clear and black, and easily read?	Go to step 3.	Go to FIP2.18 HVPS/MCU
3	Checking ROS ASSY Are the connectors on ROS ASSY surely connected?	Go to step 4.	Reconnect the connectors.
4	Checking 150 FEEDER ASSY ground Remove EP CARTRIDGE. Check the continuity from the front open part between 150 FEEDER ASSY metal part and printer frame metal part. Is 150 FEEDER ASSY grounded?	Go to step 5.	Remove 150 FEEDER ASSY and install again for correct ground. (RRP5.1)
5	Checking FUSER ASSY ground Open COVER REAR (PL1.4). Check the continuity between printer frame and the screw on the back of FUSER ASSY. Is FUSER ASSY grounded?	Go to step [ESS and possible causative parts].	Remove FUSER ASSY and install again. (RRP8.8)

FIP-1.P12 Skew


SCO012F

Trouble substancee
The printed image is not paralleled with both sides of the paper.

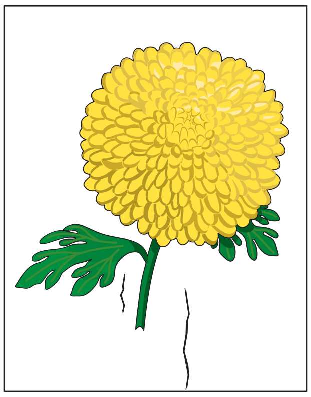
ESS and possible causative parts
- EP CARTRIDGE
- BTR ASSY (PL8.1.21)
- 150 FEEDER ASSY (PL5.1.1)
- FUSER ASSY (PL8.1.20)
- Paper Cassette
- PLATE ASSY BTM (PL2.1.10, PL3.1.10, PL4.1.10)
- 150 Paper Feeder
- 250 Paper Feeder
- Option 550 Paper Feeder
- PWBA ESS (PL12.1.13)
- 250 FEEDER ASSY (PL6.1.11)
- 550 FEEDER ASSY (PL7.1.10)

Before commencing troubleshooting, check the paper transfer course. Make sure there is no foreign articles on the transfer course, such as staples, paper clips, scraps of paper and so on.

Step	Check	Yes	No
1	Checking the installation place Check if there is any irregularity on the installation place. Check if there is any missing Foot. Is the setup surface normal?	Go to step 2.	Arrange the installation place normally.
2	Checking the paper feeding Remove the Paper Cassette. Insert the paper to the Paper Cassette correctly. Install the Paper Cassette to the printer. Install PLATE ASSY BTM correctly. (not to incline right or left) (RRP2.5, 3.5 and 4.5) Re-print the problem image. Does the problem still occur?	Go to step 3.	End of work
3	Check the paper transfer course. Check if there are any stains or obstacles on the paper transfer course between the paper feeding tray and the exit tray. Are there any obstacles on the paper transfer course?	Go to step 4.	Remove the obstacles or stains from the paper transfer course.
4	Checking the rolls on the paper transfer course Check all the rolls on the course, where the paper transfer between paper feeding entrance tray and exit tray, and check if there are any stains, wear or damages. Check if the pinch roll rotates freely, and the spring pressure is even. Are there any stains, wear or damages on the rolls in the paper transfer course?	Go to step 5.	Replace the damaged or worn-out rolls. (Refer to corresponding RRPs, for replacement.)
5	Checking EP CARTRIDGE Install a new EP CARTRIDGE. Re-print the problem image. Is the image still skew?	Go to step [ESS and possible causative parts].	End of work

FIP-1.P13 Paper damage

Trouble substance
The paper comes out from the printer crumpled, folded or worn-out.


SCO013F

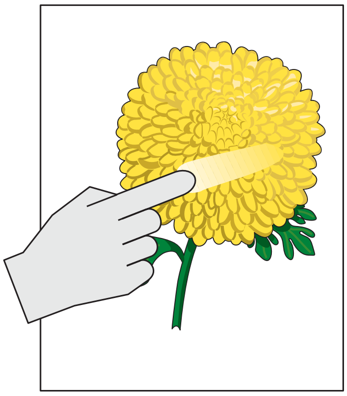
ESS and possible causative parts
- FUSER ASSY (PL8.1.20)
- Heat Roll
- Pressure Roll
- PWBA ESS (PL12.1.13)
- 150 FEEDER ASSY (PL5.1.1)
- EP CARTRIDGE
- BTR ASSY (PL8.1.21)
- Paper Cassette
- PLATE ASSY BTM (PL2.1.10, PL3.1.10, PL4.1.10)
- 150 Paper Feeder
- 250 Paper Feeder
- 250 FEEDER ASSY (PL6.1.11)
- 550 FEEDER ASSY (PL7.1.10)
- Option 550 Paper Feeder

Before commencing troubleshooting, check the paper transfer course. Make sure there is no foreign articles on the transfer course, such as staples, paper clips, scraps of paper and so on.

Step	Check	Yes	No
1	Checking the paper feeding Observe the paper feeding condition. Is the paper fed crooked?	Go to FIP-1.P12 Skew.	Go to step 2.
2	Checking the paper condition Have new, dry and recommended paper on. Carry out a test printing. (Refer to Chapter 2 Diagnostic [TEST PATTERN MODE MENU]. Dose the problem still occur?	Go to step 3.	End of work
3	Check the paper transfer course. Check if there are any stains or obstacles on the paper transfer course between the paper feeding tray and the exit tray. Are there any obstacles on the paper transfer course?	Go to step 4.	Remove the obstacles or stains from the paper transfer course.
4	Checking the rolls on the paper transfer course Check all the rolls on the course, where the paper transfer between paper feeding entrance tray and exit tray, and check if there are any stains, wear or damages. Are there any stains, wear or damages on the rolls in the paper transfer course?	Go to step 5.	Replace the damaged or worn-out rolls.

Step	Check	Yes	No
5	Checking Heat Roll and Pressure Roll Remove FUSER ASSY. (RRP8.8) **Warning; Start the operation after the FUSER ASSY have cooled down.** Turn the Gear HR with a finger, and check the Heat Roll and Pressure Roll. Are the Heat Roll and Pressure Roll damaged or stained?	Go to step 6.	Replace FUSER ASSY. (RRP8.8)
6	Checking EP CARTRIDGE Install a new EP CARTRIDGE. Carry out a test printing. Is the paper still damaged?	Go to step [ESS and possible causative parts].	End of work

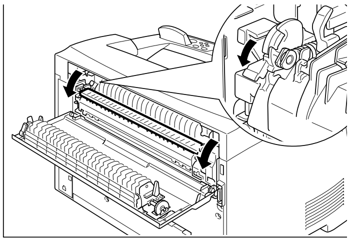
FIP-1.P14 No fix


SCO014F

Trouble substance
The printed image is not fixed on the paper properly. The image easily comes off when rubbed.

ESS and possible causative parts
- FUSER ASSY (PL8.1.20)
- Heat Roll
- Pressure Roll
- PWBA ESS (PL12.1.13)
- LVPS (PL12.1.5)

Before commencing troubleshooting, check the paper transfer course. Make sure there is no foreign articles on the transfer course, such as staples, paper clips, scraps of paper and so on.

Step	Check	Yes	No
1	Checking FUSER ASSY installation Check that the levers on both sides of the FUSER ASSY is pushed down, and then re-print the problem image. Does the problem still occur?  LPN704	Go to step 2.	End of work
2	Checking the paper condition Have new, dry and recommended paper on. Re-print the problem image. Does the problem still occur?	Go to step 3.	End of work
3	Checking Heat Roll and Pressure Roll Remove FUSER ASSY. (RRP8.8) **Warning; Start the operation after the FUSER ASSY have cooled down.** Turn the gear of the heater roller with a finger, and check the Heat Roll and Pressure Roll. Are the Heat Roll and Pressure Roll damaged or stained?	Go to step 4.	Replace FUSER ASSY. (RRP8.8)
4	Checking FUSER ASSY Turn the gear of the Heater Roller with a finger. Check the contact condition of Heat Roll and Pressure Roll when rotating. Do Heat Roll and Pressure Roll contact evenly?	Go to step [ESS and possible causative parts].	Replace FUSER ASSY. (RRP8.8)

6. Judgment of print consistency

It is stated here how to judge simply the main print consistency printing with the standard paper (letter size).

Keep the paper packaged in the operating environment for 12 hours, and then use the paper just after when unpackaged.

Note

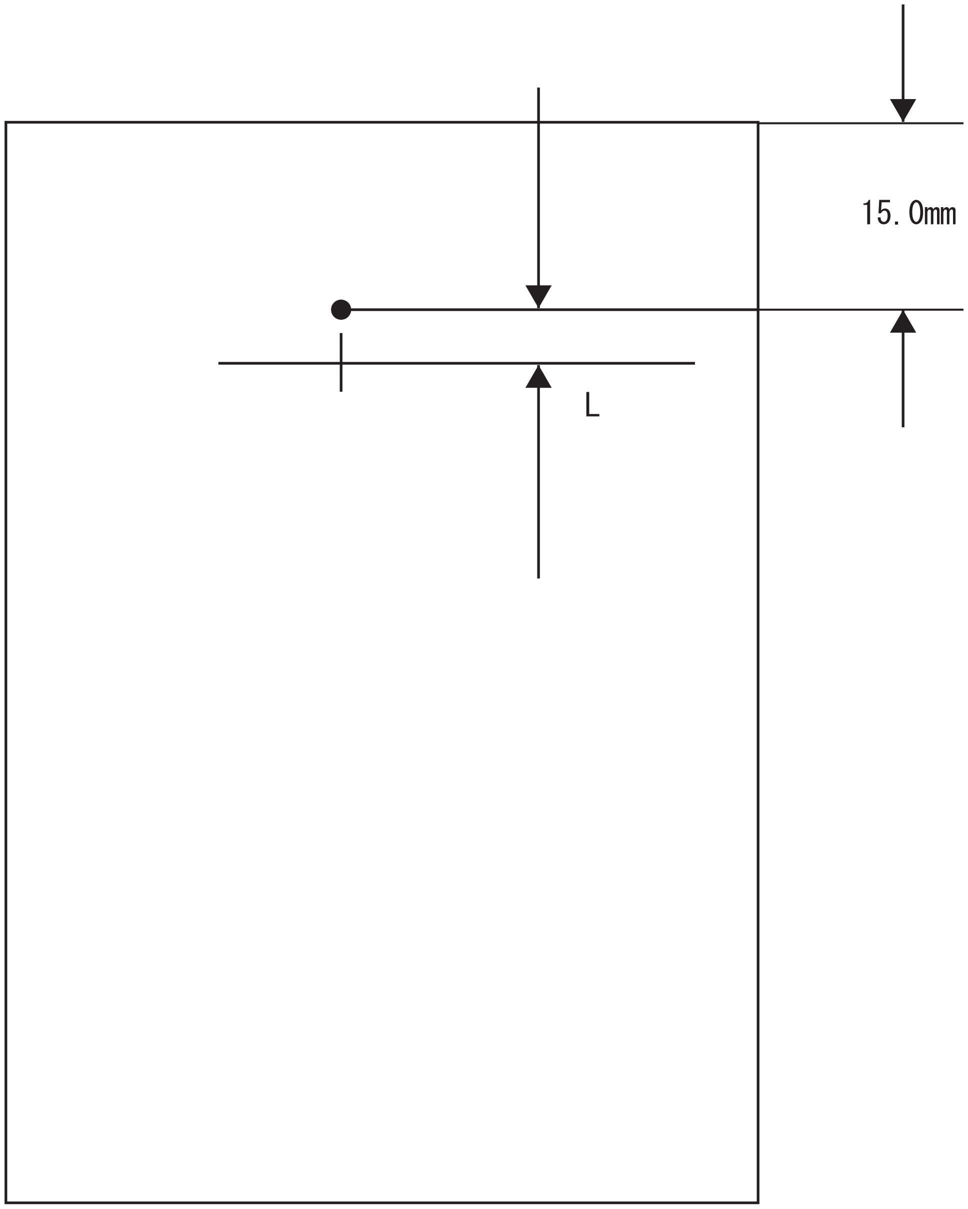
The image quality cannot be evaluated when the machine is faulty.

Leading edge registration

Measurement of the amount of print shift from the ideal position on the paper

Measure the amount of shift from the ideal point 15 mm away from the front end at center of right-and-left of the paper.

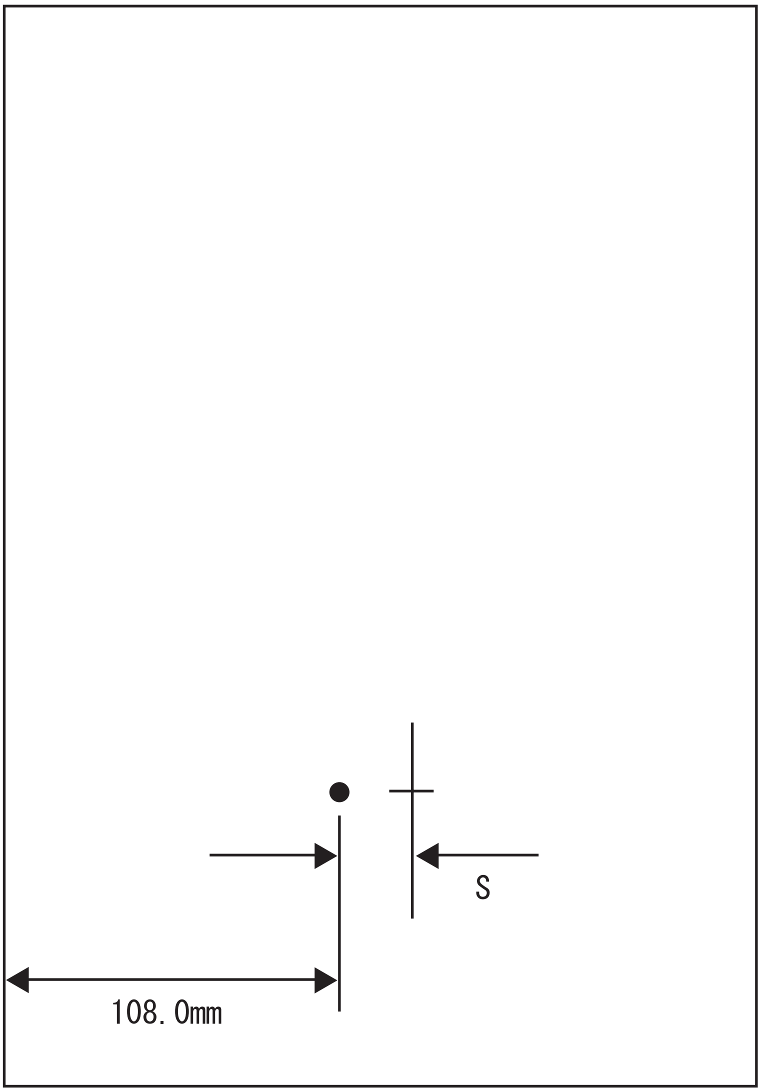
Reference: less than +/-2.0 mm



LPN6_6_1FA

Side edge registration

Measure the amount of shift from the ideal point 108.0 mm away from the left end at center of front-and-back of the paper.
Reference: less than +/-2.5 mm



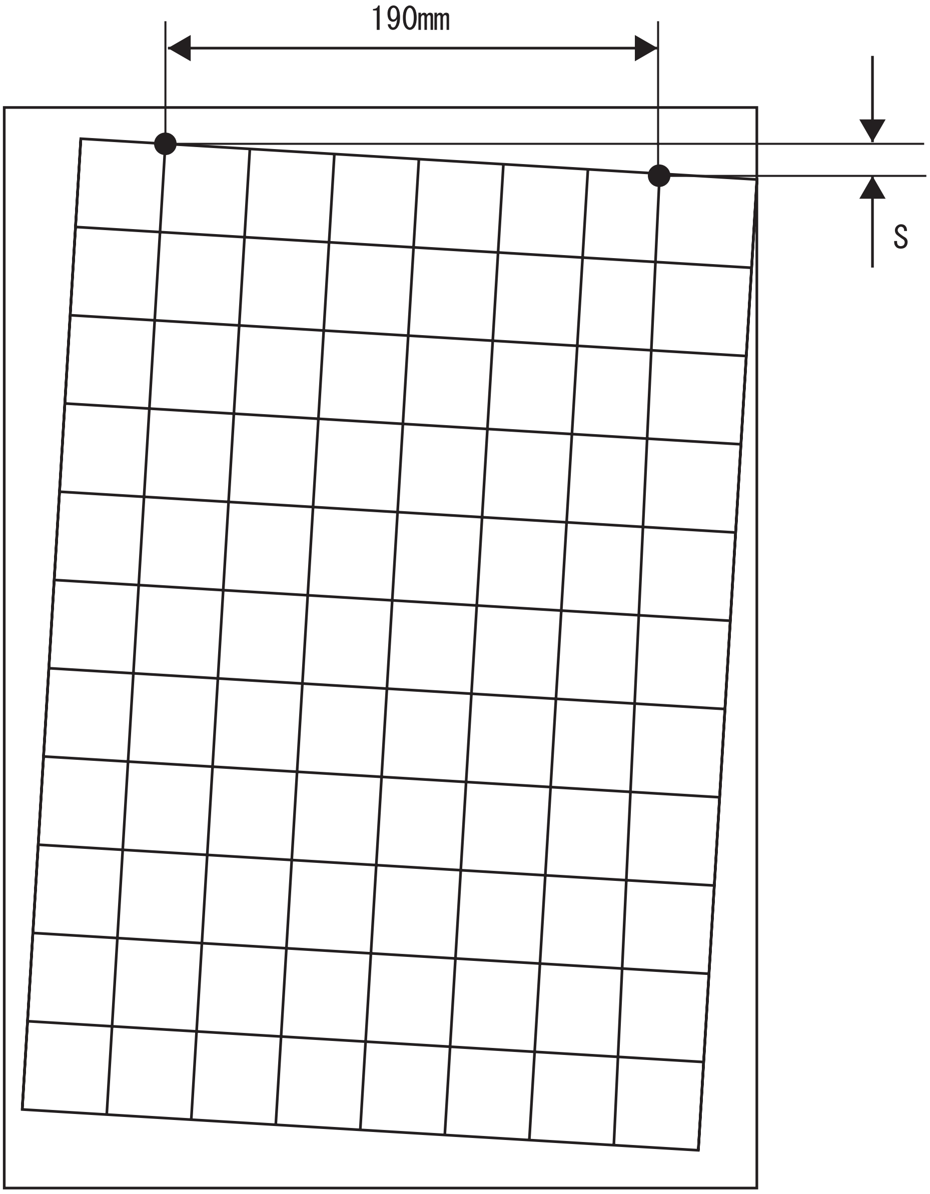
LPN6_6_2 FA

Skew

Measurement of the inclined paper feeding

Measure the vertical distance of two points 190 mm away each other on the top horizontal line.

Reference: less than +/-1.2 mm



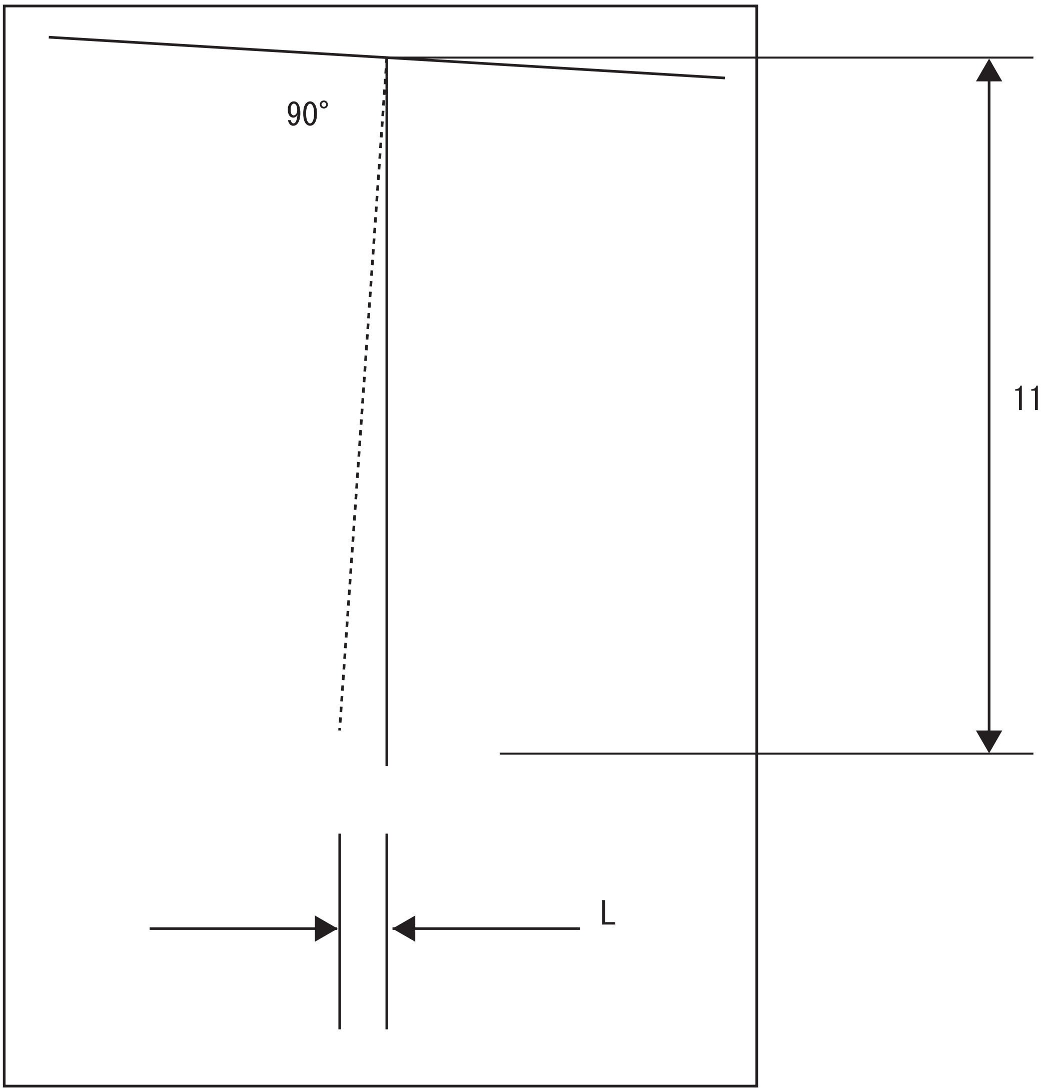
LPN6_6_3FA

Perpendicularity

Measurement of the perpendicularity for suppressing inclines of ROS and OPC

Check the perpendicular line to the horizontal line to measure the horizontal distance at the point 114.5 mm away vertically from center of top horizontal line.

Reference: less than +/-0.8 mm



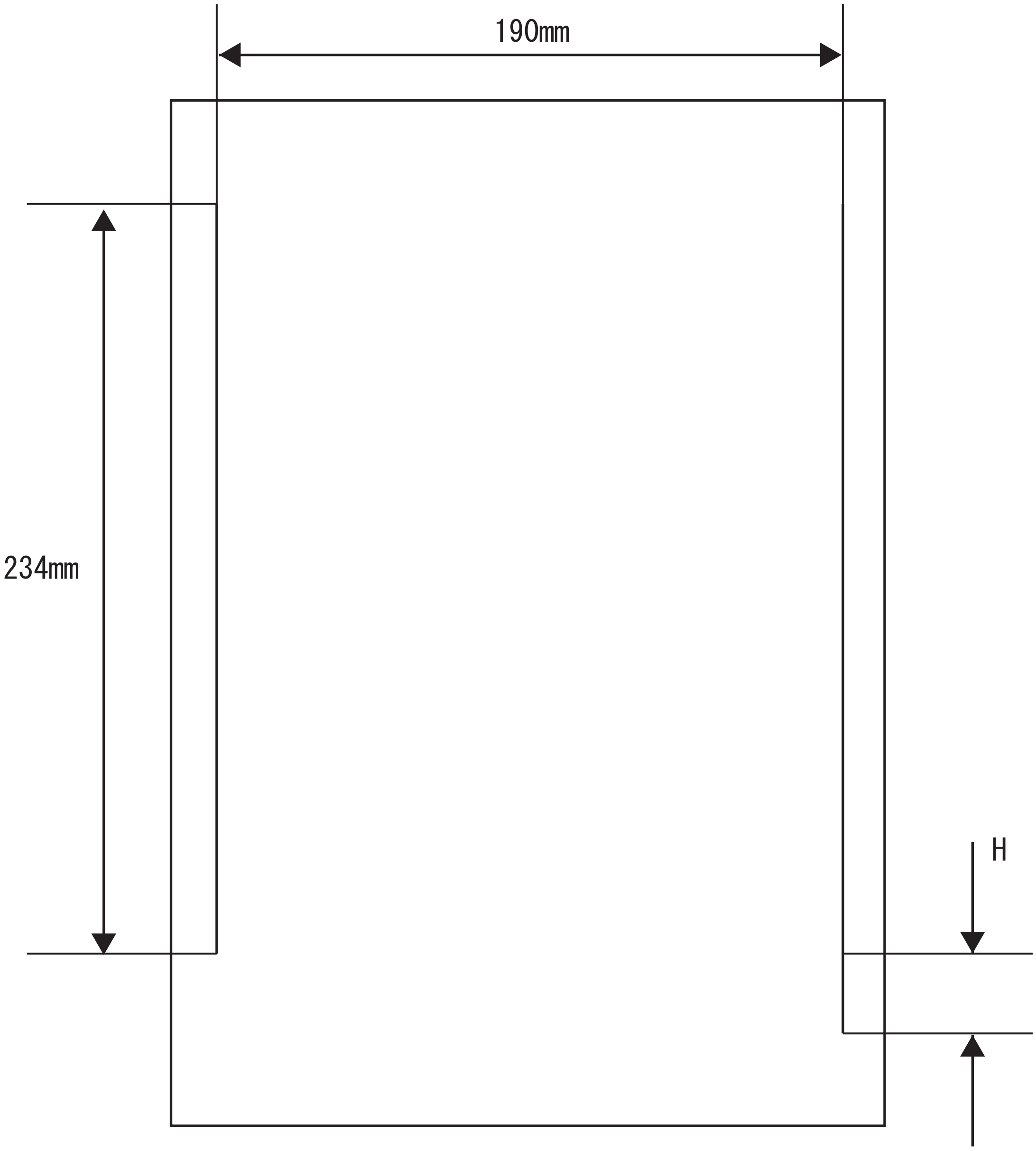
LPN6_6_4FA

Parallelism

The parallelism is difference of feeding speed between left and right sides of the paper.

Measure the difference of length between two 234 mm long vertical lines 190 mm away each other.

Reference: less than +/-1.2 mm



LPN6_6_5FA

7. Preventive maintenance

When visiting the customer, perform the maintenance work other than the original purpose to avoid any trouble that may arise.

Procedure for preventive maintenance

1) Check how the customer is using the machine.
2) Write down the cumulative print count.

NOTE **Use the cumulative print count as a guide of replacing periodic replacement parts. Replace the periodic replacement parts as required.**

3) Print several piece of paper to check no problem.
4) Remove foreign articles on BTR ASSY, FUSER ASSY and paper transfer rolls, and clean stains with a brush and dry waste cloth.

NOTE **When stains is heavy, clean with dampened cloth, and then clean with dry cloth. Be careful not to damage the parts to be cleaned.**

5) Cleaning the fan exhaust
   Remove COVER REAR, and clean the dust on MAIN FAN with a brush.
   Remove COVER FRONT, and clean the dust on FAN SUB.

NOTE **The clogged exhaust and fan cause a temperature rise inside and failures.**

6) Print several piece of paper again to check no problem.

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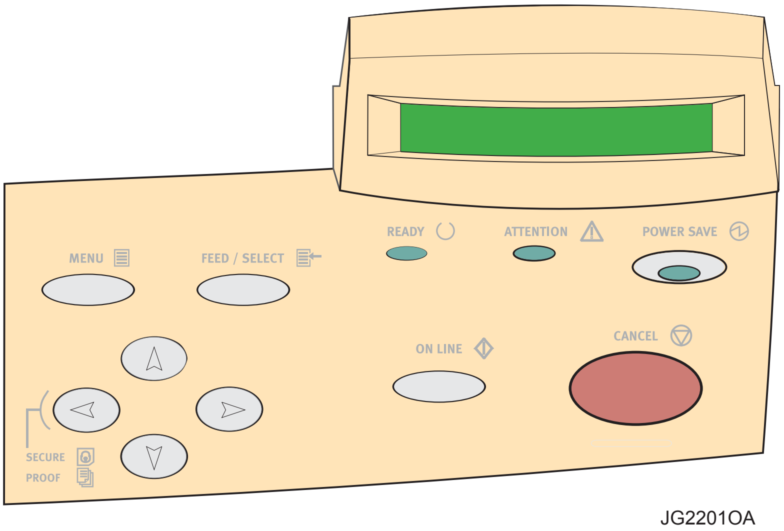
Chapter 2 Operation of Diagnostic CONTENTS

1. How to Use Diag (C/E) Mode

1.1 Roles of Control Panel in Diag (C/E) Mode



1. LCD
   Displays the Diag menus and failure descriptions, and shows and sets various types of information.

2. " ↑ " key
   - Use to select an item in the same hierarchical level.
   - Use to select a numerical value. This increases a numerical value at a cursor position when entering a numerical value.

3. " ↓ " key
   - Use to select an item in the same hierarchical level.
   - Use to select a numerical value. This decreases a numerical value at a cursor position when entering a numerical value.

4. " ← " key
   - Returns to a hierarchical level above.
   - Moves a cursor to the left when entering a value with several digits.

5. " → " key
   - Use to move to a hierarchical level under the target selected.
   - Moves a cursor to the right when entering a value with several digits.

6. "MENU" key
   - Shows a common menu screen which belongs to a hierarchical level above the target selected.

7. "FEED / SELECT" key
   - Fixes a value of a setting item in each DC No. When the value has been fixed, "*" is marked at the right side of the item on LCD. Also, use this key when performing a process such as initialization.
   - By pressing this key when a selected item has been fixed, you can move to the next setting item.
   - Press this key when fixing a value.

8. "ON LINE" key
   Press the "ON LINE" key holding down the " ← " and " → " keys to start the Diag (C/E) mode.

9. "CANCEL" key
   Instructs an interruptible Diag Code to stop. This key is ineffective for any uninterruptible Diag Code.

10. "POWER SAVE" key
    Use this key in special M/C start-up procedures.

1.2 How to Start Up M/C

Five ways of starting up M/C are available depending on an operation when turning on the power supply.
How to start up M/C and an operation when turning on the power supply are described below.

How to start up M/C	Operation when turning on power supply	Usage
Normal boot	Turn on the power supply without pressing any key.	Use in a normal way.
Long boot (with self-diagnosis)	Turn on the power supply while pressing the "POWER SAVE" and "FEED / SELECT" keys simultaneously.	In a normal boot sequence, [Normal boot diag] is executed to omit the device (ESS) diagnosis items and reduce the start-up time. On the other hand, [Long boot diag] is executed for more detailed diagnosis of the device. The diagnosis items and the differences are as follows: • RAM diagnosis: Write/Read/Verify test is executed for the entire area. • Program ROM diagnosis: The checksum is calculated to check the ROM and necessary actions are taken. • Font ROM diagnosis: The checksum is calculated to check the ROM and necessary actions are taken.
NVRAM Clear Boot	Turn on the power supply while pressing the "POWER SAVE" and " ↑ " keys simultaneously.	Initialize the configuration area (printer setting value, etc.) of NVRAM (ESS), and start up the system. (Job Log is not erased.)
NVRAM/Spool Clear Boot	Turn on the power supply while pressing the "POWER SAVE" and " ↓ " keys simultaneously.	If any error occurs when spooling in HDD and the system does not start up even though turning OFF/ON the power supply, erase the spool area in HDD and start up the system. Then, initialize the NVRAM (ESS) configuration area (printer setting value, etc.) too. (Job Log is not erased.)
Down Load	Turn on the power supply while pressing the "POWER SAVE" key.	Set to the download mode when upgrading the firmware version of the main unit.

1.3 How to Enter Diag (C/E) Mode

1. When [Ready to print] is displayed, press and release the " ← " and " → " keys, and then press the "ON LINE" key within three seconds.
2. Display the initial screen [Diag. Menu Preventive Diag] of the Diag common menu on LCD.
3. When you have entered the Diag (C/E) mode, select a desired menu screen from the common menu using the " ← " and " → " key.
    (1) [Diag. Menu Preventive Diag] → Preventive maintenance menu screen
    (2) [Diag. Menu Fault Diag.] → Fault diagnosis menu screen
    (3) [Diag. Menu Adjustment] → Adjustment menu screen

1.4 Exiting Diag (C/E) Mode

There are two ways of exiting the Diag (C/E) mode, i.e., through the work non-completion and completion instructions.

- When you have exited the Diag mode through the work completion instruction, any information on the Shutdown History and Jam/Fail Counter is cleared automatically.
- When you have exited the Diag mode through the work non-completion instruction, any information on the Shutdown History and Jam/Fail Counter is transited, not cleared.

NOTE

- **You can exit the Diag mode also by turning OFF/ON the power supply.**
- **When exiting the Diag (C/E) mode, if a communications error or power failure occurs while saving the previous HFSI counter, a value of the previous HFSI counter is not guaranteed.**

Procedure:

1. Press the "CANCEL" key to stop the running Diag, if any.
2. In any Diag screen, press and release the " ← " and " → " keys simultaneously, and then press the "ON LINE" key within three seconds.
3. The Diag Exit screen [Exit Diagnostics Incomplete exit] is shown.
4. Select the [Exit Diagnostics Incomplete Exit] or [Exit Diagnostics Complete Exit] screen using the " ↑ " or " ↓ " key.

NOTE

When you press the "MENU" key here, you can return to the [Diag. Menu Preventive Diag] screen of the Diag common menu.

5. Press the "FEED / SELECT" key to fix a selected item. Then, the confirmation message [Not available If OK press SEL] or [Available If OK press SEL] is shown.
6. Press the "FEED / SELECT" key again to execute the process.
7. Exit the Diag (C/E) mode. (Restart the system in the normal mode.)

1.5 Configuration of Diag (C/E) Mode Menus

The Diag common menu consists of the “Preventive maintenance”, “Fault diagnosis”, “Adjustment”, and Max Set Up menus. Each hierarchical level under the individual menus has its Diag Code functions.

Procedure:

1. Preventive maintenance menu
   Check the number of errors occurred and the wear of consumables to prevent machine troubles.
   - DC122 SDHistory
   - DC135 HFSI
2. Fault diagnosis menu
   Check an operation of each component, investigate whether a trouble occurs, and locate the trouble, if any.
   - DC140 Monitor
   - DC330 Components
   - DC355 HDD DIAG
   - DC612 PatternPrt
3. Adjustment menu
   Perform an operation of NVM.
   - DC131 NVM R/W
   - DC132 Serial No. set (Displayed only when a specified fail has occurred.)
   - DC301 NVM Init.

1.6 How to Select Diag Code

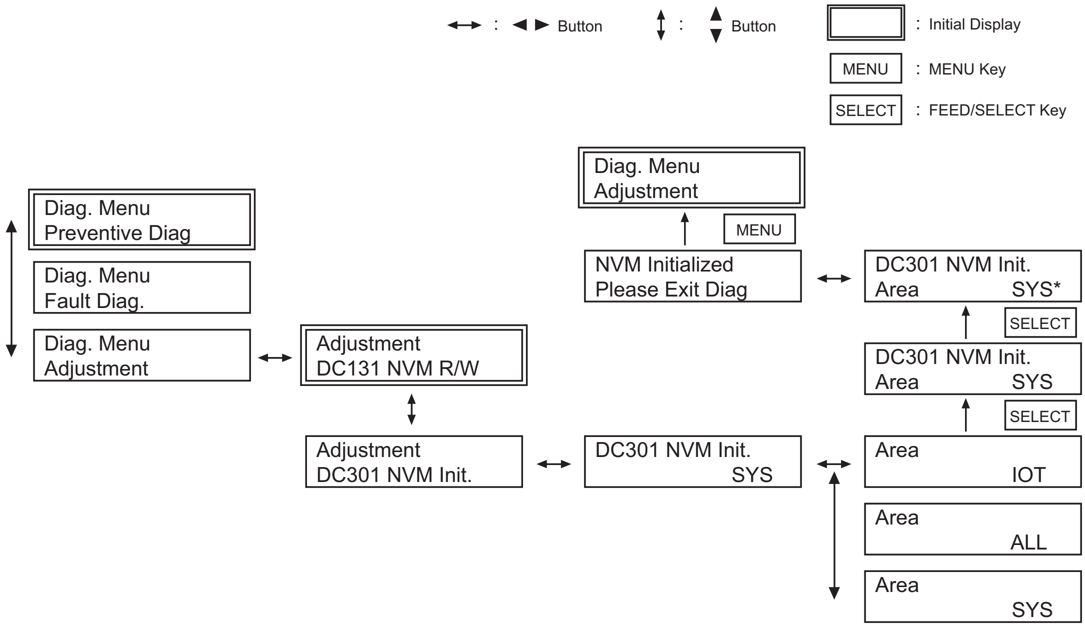
1. Enter the Diag (C/E) mode.
2. Select an applicable menu item in the common menu using the " ↑ " or " ↓ " key.
3. To select a Diag Code (DC) item in a lower level, use the " → " key.
4. To select a DC item in the same hierarchical level, use the " ↑ " or " ↓ " key.
5. Press the "FEED / SELECT" key to fix a desired DC item.
6. Press the "FEED / SELECT" key again to execute the process.

NOTE

No key operation can be executed during executing the process.

7. When the process has been completed, "*" is marked at the right-hand side of the DC menu and the key operation becomes available.
8. Show the screen to prompt you to exit the Diag mode, , using the " ← " or "MENU" key.
9. Press the "MENU" key to return to any common menu which belongs to an upper level.

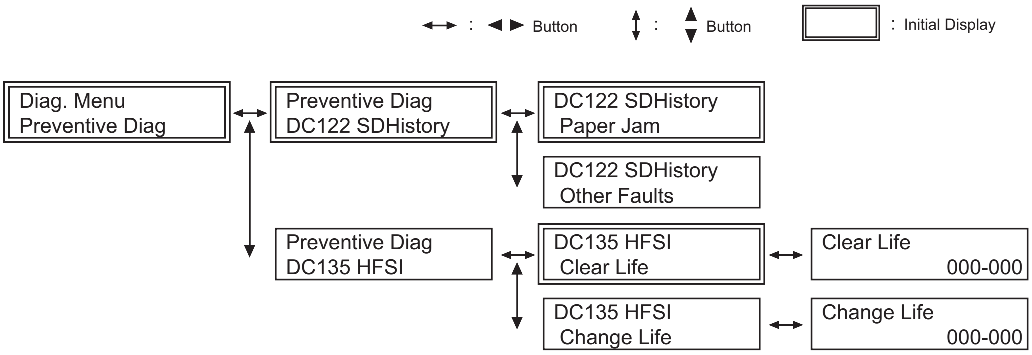
<Example of Operation of [DC301 NVM Init. (area: IOT)]>


: ◄ ► Button
: ▲▼ Button
: Initial Display
MENU : MENU Key
SELECT : FEED/SELECT Key
Diag. Menu Preventive Diag
Diag. Menu Fault Diag.
Diag. Menu Adjustment
Adjustment DC131 NVM R/W
Adjustment DC301 NVM Init.
DC301 NVM Init. SYS
Area IOT
Area ALL
Area SYS
SELECT
DC301 NVM Init. Area SYS
SELECT
DC301 NVM Init. Area SYS*
NVM Initialized Please Exit Diag
MENU
Diag. Menu Adjustment

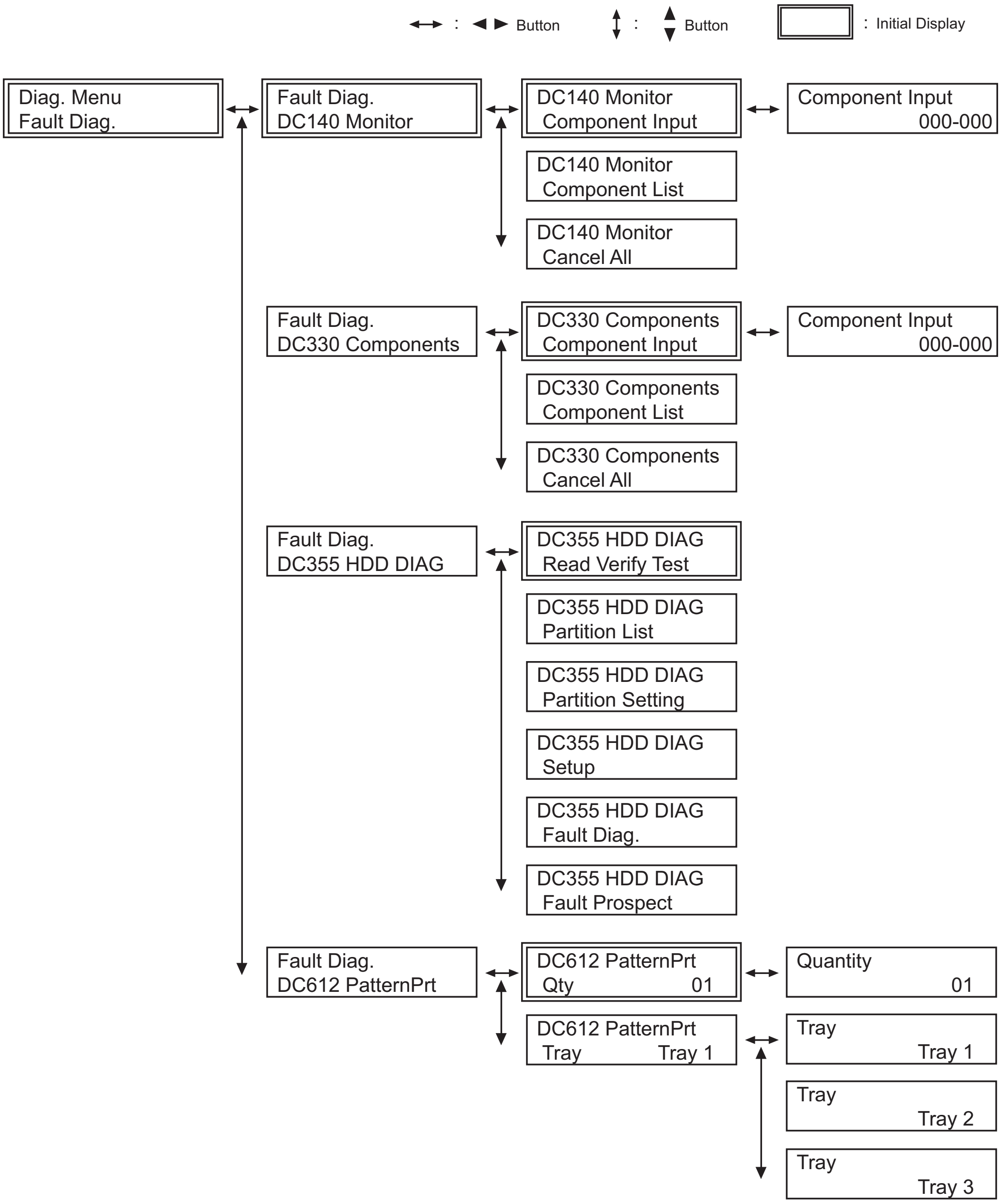
NOTE

In [DC301 NVM Init.], only [area:SYS] can be executed. [area:IOT] and [area:ALL] cannot be executed ("Parameter NG" is shown).

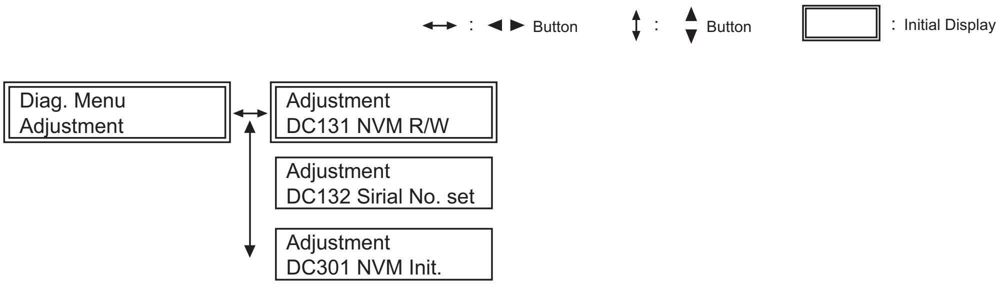
1.7 Preventive maintenance Menu Tree


: ◄ ► Button
: ▲▼ Button
: Initial Display
Diag. Menu
Preventive Diag
Preventive Diag
DC122 SDHistory
DC122 SDHistory
Paper Jam
DC122 SDHistory
Other Faults
Preventive Diag
DC135 HFSI
DC135 HFSI
Clear Life
Clear Life
000-000
DC135 HFSI
Change Life
Change Life
000-000

1.8 Fault diagnosis Menu Tree


: ◄ ► Button
: ▲▼ Button
: Initial Display
Diag. Menu
Fault Diag.
Fault Diag.
DC140 Monitor
DC140 Monitor
Component Input
Component Input
000-000
DC140 Monitor
Component List
DC140 Monitor
Cancel All
Fault Diag.
DC330 Components
DC330 Components
Component Input
Component Input
000-000
DC330 Components
Component List
DC330 Components
Cancel All
Fault Diag.
DC355 HDD DIAG
DC355 HDD DIAG
Read Verify Test
DC355 HDD DIAG
Partition List
DC355 HDD DIAG
Partition Setting
DC355 HDD DIAG
Setup
DC355 HDD DIAG
Fault Diag.
DC355 HDD DIAG
Fault Prospect
Fault Diag.
DC612 PatternPrt
DC612 PatternPrt
Qty 01
Quantity
01
DC612 PatternPrt
Tray Tray 1
Tray
Tray 1
Tray
Tray 2
Tray
Tray 3

1.9 Adjustment Menu Tree


: ◄ ► Button
: ▲ ▼ Button
: Initial Display
Diag. Menu
Adjustment
Adjustment
DC131 NVM R/W
Adjustment
DC132 Sirial No. set
Adjustment
DC301 NVM Init.

1.10 DIAG CODE

DC122 SDHistory

Description: Specify either “Paper Jam” or “Other Faults” category to show the latest 20 items of history information.

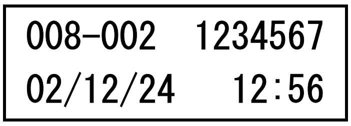
NOTE

- **Register only a jam or fault which requires CE actions (supply, change, repair) in History.**
- **The history is cleared automatically when exiting the Diag mode at the completion of a task.**
- **The history cannot be cleared by DC301 NVM Init.**
- **Register also a jam and failure occurred during Diag execution.**

<Listing paper jams>

Procedure:

1. Enter the Diag (C/E) mode, and select the [Preventive Diag DC122 SDHistory] screen and then the [DC122 SDHistory Paper Jam] screen in a lower level using the " → " key.
2. Show the history of a paper jam using the " → " key again.
   - The information shown as a history is a chain-link No. and total DV (in the order from left to right of the upper field), and the date and time of occurrence (in the order from left to right of the lower field). The time of the internal clock, which is used to record the date and time of occurrence, can be adjusted in the specification settings.



```
008-002  1234567
02/12/24   12:56
```

3. Show the history of the next (previous) paper jam using the " ↑ " or " ↓ " key.
4. Press the "MENU" key to return to the initial screen [Diag. Menu Preventive Diag].

<Listing other faults>

Procedure:

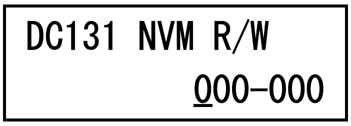
1. Enter the Diag (C/E) mode, and select the [Preventive Diag DC122 SDHistory] screen and then the [DC122 SDHistory Paper Jam] screen in a lower level using the " → " key.
2. Show the applicable DC item screen [DC122 SDHistory Other Faults] using the " ↓ " key.
3. Show the history of another fault using the " → " key again.
   - The information shown as a history is a chain-link No. and total DV (in the order from left to right of the upper field), and the date and time of occurrence (in the order from left to right of the lower field). The time of the internal clock, which is used to record the date and time of occurrence, can be adjusted in the specification settings.
4. Show the history of the next (previous) other fault using the " ↑ " or " ↓ " key.
5. Press the "MENU" key to return to the common menu screen [Diag. Menu Preventive Diag].

DC131 NVM R/W

Description: Reads from and writes to NVM.

Procedure

1. Enter the Diag (C/E) mode, and select [Diag. Menu Adjustment] in the same hierarchical level using the " ↓ " key.
2. Show the applicable DC item screen [Adjustment DC131 NVM R/W] using the " → " key.
3. Show the chain-link No. input screen using the " → " key again.

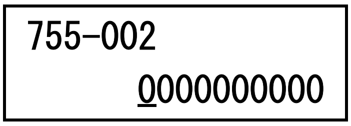


```
DC131 NVM R/W
        000-000
```

- To set the chain-link No., move the cursor using the " ← " or " → " key and change a numerical value using the " ↑ " or " ↓ " key.

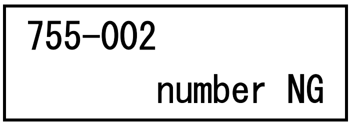
NOTE **When the cursor is positioned at the left end of the chain-link No., pressing the " ← " key allows you to return to the [Adjustment DC131 NVM R/W] screen in an upper hierarchical level.**

4. The chain-link No. is fixed by pressing the "FEED / SELECT" key.
   - If there is any applicable chain-link No., the current value of NVM and the cursor are shown.



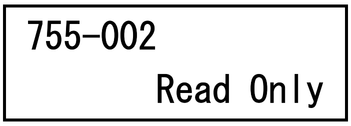
```
755-002
     0000000000
```

- If there is no applicable chain-link No., the NG screen is displayed as shown below. In this case, press the "FEED / SELECT" key to return to the chain-link No. input screen.



```
755-002
      number NG
```

5. To change the current value of NVM, move the cursor using the " ← " or " → " key and change a numerical value using the " ↑ " or " ↓ " key.
6. The changed value is rewritten by pressing the "FEED / SELECT" key. When the value is rewritten properly, "*" is marked at the right end and the key operation becomes available.
   - When the changed value cannot be rewritten, the [Read Only] screen (Figure-4) is shown for a read-only NVM or the [Value NG] screen (Figure-5) is shown if the changed value is invalid. In this case, press the "FEED / SELECT" key to return to the chain-link No. input screen.



```
755-002
      Read Only
```

```
755-002
         Value NG
```

7. Press the "MENU" key to return to the common menu screen [Diag. Menu Adjustment].

<Listing other faults>
Refer to 2.4 "DC131 NVM R/W".

DC132 M/C Serial No. set

Description: To eliminate the discrepancy between PWBs of a serial No., product No. and billing count value, which are generated when ESS PWB has been changed, set a serial No., product No. and billing count value of PWB which is not changed, in the changed PWB.

DC132 is shown only when any of the following failures has occurred.

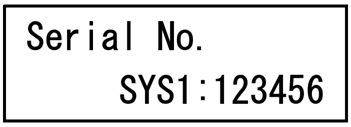
- 003-205 (Three discrepancies in billing counter)
- 003-206 (A discrepancy in billing counter)
- 103-203 (A product No. has not been initialized.)
- 103-204 (A serial No. has not been initialized.)
- 103-207 (When at least one product No. is different.)
- 103-208 (When at least one serial No. is different.)

NOTE

- **MCU PWB contains serial and product Nos. in two places, and ESS PWB in three places. ESS PWB also contains a billing count in three places.**
- **"SYS1", "SYS2" and "SYS3" in UI refer to ESS PWB.**
- **When changing ESS PWB, use the EEP ROM for the old PWB.**

Procedure:

1. Enter the Diag (C/E) mode, and select [Diag. Menu Adjustment] in the same hierarchical level using the " ↓ " key.
2. Select the [Adjustment DC131 NVM R/W] screen using the " → " key.
3. Select [Adjustment DC132 Serial No. set] in the same hierarchical level using the " ↓ " key.
4. Show the serial No. of SYS1 using the " → " key.



```
Serial No.
     SYS1:123456
```

- Show the serial Nos. of SYS2 and SYS3 respectively using the " ↓ " key.

5. Then, each time you press the " ↓ " key, the values of SYS1, SYS2 and SYS3 are shown for a product No., billing full color, billing color 1, billing color 2, billing B/W, billing large color and billing large B/W, in that order.

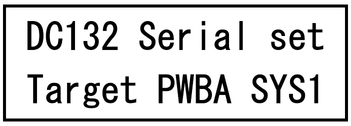
NOTE

For a new PWB, "*" is shown as the values of serial and product Nos.

6. Press the " ↓ " key to go to the screen for selecting an unchanged PWB.

NOTE

Any PWB (new or garbled PWB) where "*" is included in the value displayed in the step 5 above is not shown as a target PWB. If "*" is included in all PWBs due to any trouble, the following screen itself is not shown.



```
DC132 Serial set
Target PWBA SYS1
```

  - Use the " → " key to select a PWB, and, by pressing the "FEED / SELECT" key, "*" is marked at the right end of PWB and the target PWB is fixed.

7. Show the serial No. setting screen using the "FEED / SELECT" key again.

```
Serial No. Input
      0000000000
```

  - Move the cursor using the " ← " or " → " key, and change a numerical value using the " ↑ " or " ↓ " key.
  - Press the "FEED / SELECT" key to fix the serial No.

8. If the serial No. is correct, the re-entry screen is shown for confirmation. If the serial No. is confirmed, the process is executed. [DC132 Serial set In progress] is displayed during the process. When the process is completed properly, [DC132 Serial set Complete] is displayed. If an abnormal end occurs, the [DC132 Serial set Serial No. NG] screen is shown.
9. Press the "MENU" key to return to the common menu screen [Diag. Menu Adjustment].

DC135 HFSI

Description: Change a current status value (hereinafter referred to as the "current life") and a change Interval value (hereinafter referred to as "spec life") of a specified consumable item.

- [Clear Life]
  Clear a current life value of a changed HFSI component to zero.
- [Change Life]
  Change an initial value of a spec life which refers to the time to change the HFSI component. However, there is no component whose spec life can be changed at this moment.

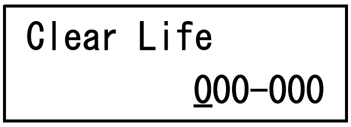
NOTE

Even if a current life exceeds a spec life, counting-up continues. However, if a counted value reached a maximum value, the maximum value is held.

<Clearing a current life value>

Procedure:

1. Enter the Diag (C/E) mode, and select the [Preventive Diag DC122 SDHistory] screen in a lower level using the " → " key.
2. Select [Preventive Diag DC135 HFSI] in the same hierarchical level using the " ↓ " key.
3. Show the applicable DC item screen [DC135 HFSI Clear Life] using the " → " key.
4. Show the current life clear screen using the "FEED / SELECT" key again.



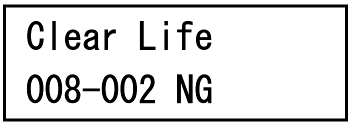
```
Clear Life
        000-000
```

- To set the chain-link No., move the cursor using the " ← " or " → " key and change a numerical value using the " ↑ " or " ↓ " key.

NOTE

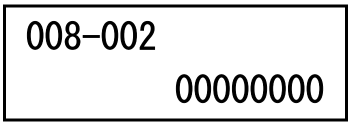
When the cursor is positioned at the left end of the chain-link No., pressing the " ← " key allows you to return to the [DC135 HFSI Clear LIfe] screen in an upper hierarchical level.

5. The chain-link No. is fixed by pressing the "FEED / SELECT" key. Then, "*" is marked at the right end of the changed value.
6. If there is any applicable chain-link No., show the current life using the "FEED / SELECT" key.
7. If there is no applicable chain-link No., the screen below is shown.



```
Clear Life
008-002 NG
```

8. The current life display screen is changed into the zero clear instruction screen by pressing the "→ " key.



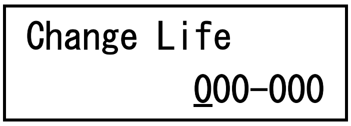
```
008-002
        00000000
```

9. Press the "FEED / SELECT" key to execute zero clearing. When zero clearing has been completed, "*" is marked at the right end of the DC menu and the key operation becomes available.
10. Press the "MENU" key to return to the common menu screen [Diag. Menu Preventive Diag].

<Changing a spec life value>

Procedure:

1. Enter the Diag (C/E) mode, and select the [Preventive Diag DC122 SDHistory] screen in a lower level using the " → " key.
2. Select [Preventive Diag DC135 HFSI] in the same hierarchical level using the " ↓ " key.
3. Show the [DC135 HFSI Clear Life] screen using the " → " key.
4. Select the applicable DC item screen [DC135 HFSI Change Life] in the same hierarchical level using the " ↓ " key.
5. Show the spec life change screen using the " → " key.

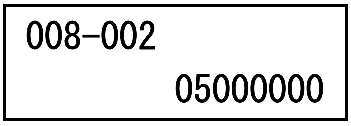


```
Change Life
         000-000
```

- To set the chain-link No., move the cursor using the " ← " or " → " key and change a numerical value using the " ↑ " or " ↓ " key.

NOTE **When the cursor is positioned at the left end of the changed value, pressing the " ← " key allows you to return to the [DC135 HFSI Change Life] screen in an upper hierarchical level.**

6. The chain-link No. is fixed by pressing the "FEED / SELECT" key. Then, "*" is marked at the right end of the changed value.
7. Show the changed value display (spec life display) screen using the "FEED / SELECT" key again.



```
008-002
        05000000
```

8. When you press the " → " key on the screen above, the cursor is displayed and you can change the spec life.
   - To set the value, move the cursor using the " ← " or " → " key and change a numerical value using the " ↑ " or " ↓ " key.

NOTE **When the cursor is positioned at the left end of the changed value, pressing the " ← " key allows you to return to the [DC135 HFSI Change Life] screen in an upper hierarchical level.**

9. The changed value is rewritten by pressing the "FEED / SELECT" key. When the value is rewritten properly, "*" is marked at the right end and the key operation becomes available.
   - If there is no applicable chain-link No., the NG screen is displayed as shown below. In this case, press the "FEED / SELECT" key to return to the spec life change screen.

```
Change Life
008-002 NG
```

10. Press the "MENU" key to return to the common menu screen [Diag. Menu Preventive Diag].

DC140 Monitor

Description: Monitors an analog component and checks its output.

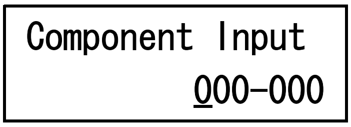
- In the input function, each analog sensor is monitored periodically and the value is displayed.
- In the output function, the output to a component in a fixed/variable value is performed. However, there is no component available for the output function.

NOTE

- **A maximum of 8 items of input and output can be operated simultaneously.**
- **If any components which are prohibited from being output simultaneously are selected, the component input first is turned off and the other component input next is turned on. (Priority is given to the component input later.)**
- **Two or more output values of an output component cannot be changed simultaneously.**
- **Two or more items of input/output cannot be selected, executed, or stopped simultaneously. (However, it is possible to stop all items simultaneously.)**
- **Even if any output value of an output component is changed, it is not reflected to the NVM value.**

Procedure:

1. Enter the Diag (C/E) mode, and select [Diag. Menu Fault Diag.] in the same hierarchical level using the " ↓ " key.
2. Select the [Fault Diag. DC140 Monitor] screen and then the [DC140 Monitor Component Input] screen in a lower level using the " → " key.
3. Show the chain-link No. input screen using the " → " key again.



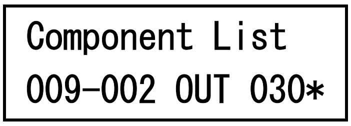
```
Component Input
        000-000
```

- To set the chain-link No., move the cursor using the " ← " or " → " key and change a numerical value using the " ↑ " or " ↓ " key.

NOTE

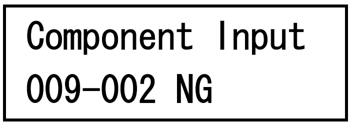
When the cursor is positioned at the left end of the chain-link No., pressing the " ← " key allows you to return to the [DC140 Monitor Component Input] screen in an upper hierarchical level.

4. The chain-link No. is fixed by pressing the "FEED / SELECT" key. Then, "*" is marked at the right end of the changed value. (A maximum of 8 items can be registered by repeating the steps 4 and 5.)
5. When the chain-link No. has been fixed, check the number of registered items using the "FEED / SELECT" key again, and execute the component.
   - When 8 items are registered, the deletion confirmation screen [Max Over.Must Del If OK press SEL] is shown for restricting the number of registered items. Then, complete the registration using the "FEED / SELECT" key.
   - If there is any applicable chain-link No. and monitoring is started, you are brought to the monitoring list screen. (The monitoring list screen is a DC menu under the [DC140 Monitor Component List] screen.)
   - The information displayed as monitoring and output is chain-link No., Input/Output, input value (monitored value)/output value (output level), in the order from left to right of the lower field.
   - For any component in progress, "*" is marked at the right side of the input or output value.



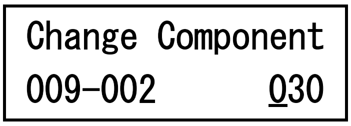
```
Component List
009-002 OUT 030*
```

6. If there is no applicable chain-link No., the NG screen is displayed as shown below. In this case, press the "FEED / SELECT" key to return to the chain-link No. input screen.



```
Component Input
009-002 NG
```

7. If you want to terminate the execution of components, use the "CANCEL" key. Then, using the " ↑ " or " ↓ " key allows you to show the next (previous) component.
8. Pressing the "FEED / SELECT" key allows you to restart the execution of components under suspension.
9. If you want to change a component output, you must go to the output change screen.
   (1) On the monitoring list screen in progress, use the " → " key to show the output change screen.



```
Change Component
009-002       030
```

   (2) To set the output value, move the cursor using the " ← " or " → " key and change a numerical value using the " ↑ " or " ↓ " key.

NOTE

When the cursor is positioned at the left end of the input or output value, pressing the
" ← " key allows you to return to the monitoring list screen in an upper hierarchical level.

   (3) The changed output value is fixed by pressing the "FEED / SELECT" key. Then, you are brought back to the monitoring list screen.

10. If you want to cancel the operation of all the components, you must go to the [DC140 Monitor Cancel All] screen.
    (1) On the monitoring list screen in progress, use the " ← " key to return to the [DC140 Monitor Component List] screen in an upper hierarchical level.
    (2) Select [DC140 Monitor Cancel All] in the same hierarchical level using the " ↓ " key.
    (3) Show the [Cancel All If OK press SEL] screen using the " → " key.
    (4) Press the "FEED / SELECT" key to cancel the operation and listing of all the components. The [Cancel All In progress] screen is shown during cancellation.
    (5) After the cancellation has been completed, the [Cancel All If OK press SEL] screen is shown again.
11. Press the "MENU" key to return to the common menu screen [Diag. Menu Fault Diag.].

DC301 NVM Init.

Description: Initializes an NVM area.

NOTE

In [NVM Init.], any settings for a billing counter, M/C serial No., market, HFSI, shutdown history and jam/fail counter are not initialized. Settings for a shutdown history and jam/fail counter are cleared by selecting the [Exit Diagnostics Complete Exit] screen when exiting the Diag mode.

NOTE

In [NVM Init.], only [area:SYS] can be executed. [area:IOT] and [area:ALL] cannot be executed ("Parameter NG" is shown). Therefore, NVM is initialized by downloading an output setting value for the MCU NVM initialization through the firmware upgrade. Two types of output setting values are available as described below:

1. Initialization file

   Initializes NVMs, except for the following items specific to the machine.

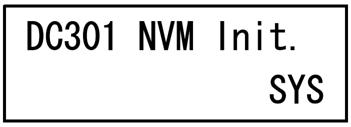
   - Serial No.
   - Counter (Billing, HFSI, etc.)
   - Shipment adjustment item (Color/Tray Regi., relation, magnification, Loop amount, etc.)

2. Specified Place (Address) Rewriting File

   Rewrites the contents of specified address in NVM, mainly for troubleshooting.

Procedure:

1. Enter the Diag (C/E) mode, and select the [Diag. Menu Adjustment] screen in a lower level using the " → " key.
2. Select [Adjustment DC131 NVM R/W] in the same hierarchical level using the " ↓ " key.
3. Show the [Adjustment DC301 NVM Init.] screen using the " ↓ " key.
4. Show the initialization setting item screen using the " → " key.



```
DC301 NVM Init.
            SYS
```

5. Initialize the SYS area using the "FEED / SELECT" key. After initializing, "*" is marked at the right end of the area display and the key operation becomes available.
6. Show the [NVM Initialized Please exit Diag] screen to prompt you to exit the Diag mode, using the " ← " or "MENU" key.
7. Press the "MENU" key to return to the common menu screen [Diag. Menu Adjustment].

DC330 Components

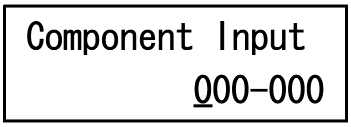
Description: Enables an input/output checking for each component.

NOTE

- **A maximum of 8 items of input and output can be operated simultaneously.**
- **If any components which are prohibited from being output simultaneously are selected, the component input first is turned off and the other component input next is turned on. (Priority is given to the component input later.)**
- **If there are two or more components which are prohibited from being output simultaneously, turn off all the applicable components and then turn on the component input later.**

Procedure:

1. Enter the Diag (C/E) mode, and select [Diag. Menu Fault Diag.] in the same hierarchical level using the " ↓ " key.
2. Select the [Fault Diag. DC140 Monitor] screen in a lower level using the " → " key.
3. Select the [Fault Diag. DC330 Components] screen using the " ↓ " key.
4. Select the [DC330 Components Component Input] screen in a lower level using the " → " key.
5. Show the chain-link No. input screen using the " → " key again.



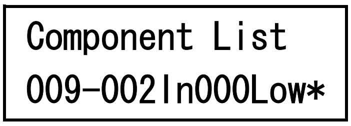
```
Component Input
        000-000
```

- To set the chain-link No., move the cursor using the " ← " or "→ " key and change a numerical value using the " ↑ " or " ↓ " key.

NOTE

When the cursor is positioned at the left end of the chain-link No., pressing the " ← " key allows you to return to the [DC330 Components Component Input**] screen in an upper hierarchical level.**

6. The chain-link No. is fixed by pressing the "FEED / SELECT" key. Then, "*" is marked at the right end of the changed value. (A maximum of 8 items can be registered by repeating the steps 6 and 7.)
7. When the chain-link No. has been fixed, check the number of registered items using the "FEED / SELECT" key again, and execute the component.
   - When 8 items are registered, the deletion confirmation screen [Max Over.Must Del If OK press SEL] is shown for restricting the number of registered items. Then, complete the registration using the "FEED / SELECT" key.
   - If there is any applicable chain-link No. and monitoring is started, you are brought to the monitoring list screen. (The monitoring list screen is a DC menu under the [DC330 Components Component List] screen.)
   - The information displayed as I/O is a chain-link No., input/output, counter (shows the accumulated number of changes of High/Low only at input), status indication (Input: "High/Low" indication at a connector level; Output: "On/Off" indication), in the order from left to right of the lower field.
   - For any component in progress, "*" is marked at the right side of the status indication.



```
Component List
009-002In000Low*
```

8. If there is no applicable chain-link No., the NG screen is displayed as shown below. In this case, press the "FEED / SELECT" key to return to the chain-link No. input screen.

```
Component Input
009-002 NG
```

9. If you want to terminate the execution of components, use the "CANCEL" key. Then, using the " ↑ " or " ↓ " key allows you to show the next (previous) component.
10. Pressing the "FEED / SELECT" key allows you to restart the execution of components under suspension.
11. If you want to switch the cycle operation of an output component, you must go to the list screen.
    (1) On the component screen under suspension, use the " → " key to instruct the cycle operation.
    (2) When the cycle operation is started, "Cyc" is shown in the status indication on the list screen.

```
Component List
009-002  OUT Cyc
```

12. If you want to cancel the operation of all the components, you must go to the [DC330 Componets Cancel All] screen.
    (1) On the list screen in progress, use the " ← " key to return to the [DC330 Components Component List] screen in an upper hierarchical level.
    (2) Select [DC330 Componets Cancel All] in the same hierarchical level using the " ↓ " key.
    (3) Show the [Cancel All If OK press SEL] screen using the " → " key.
    (4) Press the "FEED / SELECT" key to cancel the operation and listing of all the components. The [Cancel All In progress] screen is shown during cancellation.
    (5) After the cancellation has been completed, the [Cancel All If OK press SEL] screen is shown again.
13. Press the "MENU" key to return to the common menu screen [Diag. Menu Fault Diag.].

DC355 HDD DIAG

Description: Performs setups, change judgments, etc. when changing or checking HDD.

- HDD read verification test can be performed.
- HDD partition size can be checked.
- HDD partition size can be set.
- HDD (file system) can be set up.
- HDD fault diagnosis can be performed.
- SMART (Self-monitoring, analysis and reporting technology) of HDD can be executed to predict HDD failure.

NOTE

- **Any operation cannot be interrupted.**
- **If any failure unrelated to an operation occurs, the operation can be continued.**
- **Any setting made in the [Partition setting] screen is enabled after M/C is rebooted using the Diag Exit screen.**
- **If M/C is rebooted after making settings in the [Partition setting] screen, rebooting is performed automatically again during M/C initialization.**
- **Any operation to activate HDD cannot be executed before exiting the Diag mode after [Partition setting]. However, the following operations can be executed:**
  (1) Checking a partition size
  (2) Setting a partition size
- **If you make settings in the [Partition setting] screen several times, the last setting is enabled.**

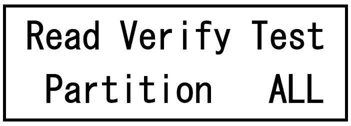
<Executing a read verification test>

NOTE

"It takes a long time (approximately 20 minutes for 4GB) to execute a read verification test ("Read Verify Test"). So, if an error code which seems to be related to HDD is shown (including any error which disappears when HDD is removed), it is practical to execute a fault diagnosis and prediction and to set (= format) a partition size ("Partition setting") before changing HDD.

Procedure:

1. Enter the Diag (C/E) mode, and select [Diag. Menu Fault Diag.] in the same hierarchical level using the " ↓ " key.
2. Select the [Fault Diag. DC140 Monitor] screen in a lower level using the " → " key.
3. Select [Fault Diag. DC355 HDD DIAG] in the same hierarchical level using the " ↓ " key.
4. Select the [DC355 HDD DIAG Read Verify Test] screen using the " → " key.
5. Show the setting item screen using the " → " key again. Then, to perform read verification tests of all partitions, follow the step below. To perform a read verification test of each partition individually, go to the step 6.



```
Read Verify Test
 Partition   ALL
```

(1) Select [Read Verify Test If OK press SEL] in the same hierarchical level using the " ↓ " key.

(2) Execute a read verification test again using the "FEED / SELECT" key. The remaining time is shown. (The execution time in a range between 0 and 255 minutes is indicated in "xxx".)
  - When the test has been completed normally, the [Read Verify Test Completed] screen is shown.
  - When the test has been completed abnormally, the [Read Verify Test Completed abnormally A] screen is shown. (A malfunctioned partition is indicated.)
  - If you select "Partition ALL" to instruct the execution, the process is terminated at the malfunctioned partition and the abnormal termination screen is shown.

NOTE **If the test has been completed abnormally, make partition size settings ("Partition setting").**

(3) Press the "MENU" key to return to the common menu screen [Diag. Menu Fault Diag.].

6. Show the partition selection screen [Partition A] using the " → " key. You can select the partitions [Partition A], [Partition B], [Partition C], [PartitionD], [Partition H] and [Partition ALL] in that order, using the " ↓ " or " ↑ " key.
7. Use the "FEED / SELECT" key to fix the partition for a read verification test. For example, if you select [Partition D] and fix it, "*" is marked at the right end of the partition name (i,e. [Partition D*]).
8. Show the execution instruction screen [Read Verify Test If OK press SEL] using the "FEED / SELECT" key.
9. Execute a read verification test again using the "FEED / SELECT" key. The remaining time is shown. (The execution time in a range between 0 and 255 minutes is indicated in "xxx".)
   - When the test has been completed normally, the [Read Verify Test Completed] screen is shown.
   - When the test has been completed abnormally, the [Read Verify Test Completed abnormally D] screen is shown. (A malfunctioned partition is indicated.)

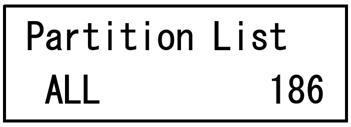
NOTE **If the test has been completed abnormally, make partition size settings ("Partition setting").**

10. Press the "MENU" key to return to the common menu screen [Diag. Menu Fault Diag.].

<Displaying a partition size>

Procedure:

1. Enter the Diag (C/E) mode, and select [Diag. Menu Fault Diag.] in the same hierarchical level using the " ↓ " key.
2. Select the [Fault Diag. DC140 Monitor] screen in a lower level using the " → " key.
3. Select [Fault Diag. DC355 HDD DIAG] in the same hierarchical level using the " ↓ " key.
4. Select the [DC355 HDD DIAG Read Verify Test] screen using the " → " key.
5. Select [DC355 HDD DIAG Partition List] in the same hierarchical level using the " ↓ " key.
6. Show the entire HDD size screen using the " → " key.



```
Partition List
 ALL        186
```

- The entire HDD size is displayed as a full capacity of HDD, not as a total value of all the partitions.

- A value in the range between 10 and 205 is shown as the entire HDD size. The unit is 0.1 Gbyte.

7. Show the partition size display screen [Partition List A 40] using the " ↓ " key. You can select the partitions [Partition List A 40], [Partition List B 40], [Partition List C 40], [Partition List D 30], [Partition List H 05] and [Partition List ALL 186] in that order, using the " ↓ " or " ↑ " key.
    - A value in the range between 1 and 40 is shown as a partition size. The unit is 0.1 Gbyte.
8. Press the "MENU" key to return to the common menu screen [Diag. Menu Fault Diag.].

NOTE **If the test has been completed abnormally, make partition size settings ("Partition setting").**

9. Press the "MENU" key to return to the common menu screen [Diag. Menu Fault Diag.].

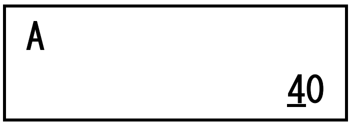
<Setting a partition size>

NOTE **"If the read verification test has been completed abnormally, make partition size settings**
("Partition setting").

Procedure:

1. Enter the Diag (C/E) mode, and select [Diag. Menu Fault Diag.] in the same hierarchical level using the " ↓ " key.
2. Select the [Fault Diag. DC140 Monitor] screen in a lower level using the " → " key.
3. Select [Fault Diag. DC355 HDD DIAG] in the same hierarchical level using the " ↓ " key.
4. Select the [DC355 HDD DIAG Read Verify Test] screen using the " → " key.
5. Select [DC355 HDD DIAG Partition setting] in the same hierarchical level using the " ↓ " key.
6. Show the confirmation message screen [Clear HDD data If OK press SEL] using the " → " key.
7. Show the initial value screen [Partition setting A 40] for the size-adjustable partition using the "FEED / SELECT" key. You can select the initial value screens [Partition setting A 40], [Partition setting B 40], [Partition setting C 40], [Partition setting D 30] and [Partition setting F30] in that order, using the " ↓ " or " ↑ " key.
8. Show the setting value change screen using the " → " key.

NOTE **If you want to set a partition size without changing any initial setting, press the " ↓ " key several times and go to the step 12.**



A

40

- A value in the range between 1 and 40 is shown as a currently set partition size. The unit is 0.1 Gbyte.
- To set the partition size, move the cursor using the " ← " or " → " key and change a numerical value using the " ↑ " or " ↓ " key.

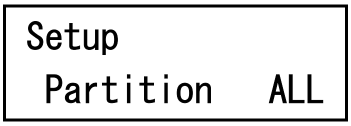
NOTE **When the cursor is positioned at the left end of the partition size, pressing the " ← " key allows you to return to the [Partition setting A 40] screen in an upper hierarchical level.**

9. The partition size is fixed by pressing the "FEED / SELECT" key. Then, "*" is marked at the right end of the changed value.
10. Show the next initial value screen [Partition setting B 40] for the size-adjustable partition using the "FEED / SELECT" key. You can select the next (or previous) initial value screen for a size-adjustable partition using the " ↓ " or " ↑ " key.
11. When you have shown the initial value screen [Partition settingD 30] for the size-adjustable partition using the " ↓ " key, the execution instruction screen [Partition setting If OK press SEL] is shown by pressing the " ↓ " key again.
12. Execute a partition size setting using the "FEED / SELECT" key. During the execution, [Partition setting In progress] is shown.
    - When the execution has been completed normally, the [Partition setting Completed] screen is shown.
    - When the execution has been completed abnormally, the [Partition setting Completed abnormally] screen is shown.
13. Show the [Change Partition size Please exit Diag] screen to prompt you to exit the Diag mode, using the " ←" or "MENU" key.
14. Press the "MENU" key to return to the common menu screen [Diag. Menu Fault Diag.].

<Executing a setup>

Procedure:

1. Enter the Diag (C/E) mode, and select [Diag. Menu Fault Diag.] in the same hierarchical level using the " ↓ " key.
2. Select the [Fault Diag. DC140 Monitor] screen in a lower level using the " → " key.
3. Select [Fault Diag. DC355 HDD DIAG] in the same hierarchical level using the " ↓ " key.
4. Select the [DC355 HDD DIAG Read Verify Test] screen using the " → " key.
5. Select [DC355 HDD DIAG Setup] in the same hierarchical level using the " ↓ " key.
6. Show the setup setting item screen (Figure-4) using the " → " key. Then, to set up all the partitions, follow the step below. To set up a partition individually, go to the step 7.



```
Setup
 Partition   ALL
```

   (1) Select the execution instruction screen [Setup If OK press SEL] in the same hierarchical level using the " ↓ " key.
   (2) Show the confirmation message screen [Clear HDD data If OK press SEL] using the "FEED / SELECT" key.
   (3) Execute a setup using the "FEED / SELECT" key again. During the execution, [Setup In progress] is shown.
       - When the execution has been completed normally, the [Setup Completed] screen is shown.
       - When the execution has been completed abnormally, the [Setup Completed abnormally] screen is shown.
   (4) Press the "MENU" key to return to the common menu screen [Diag. Menu Fault Diag.].

7. Show the partition selection screen [Partition A] using the " → " key. You can select the partitions [Partition A], [Partition B], [Partition C], [PartitionD], [Partition H] and [Partition ALL] in that order, using the " ↓ " or " ↑ " key.
8. Use the "FEED / SELECT" key to fix the partition to be set up.For example, if you select [Partition D] and fix it, "*" is marked at the right end of the partition name (i,e. [Partition D*]).
9. Show the execution instruction screen [Setup If OK press SEL] using the "FEED / SELECT" key.
10. Show the confirmation message screen [Clear HDD data If OK press SEL] using the "FEED / SELECT" key.

11. Execute a setup using the "FEED / SELECT" key again. During the execution, [Setup In progress] is shown.
    - When the execution has been completed normally, the [Setup Completed] screen is shown.
    - When the execution has been completed abnormally, the [Setup Completed abnormally] screen is shown.
12. Press the "MENU" key to return to the common menu screen [Diag. Menu Fault Diag.].

<Fault diagnosis>

Procedure:

1. Enter the Diag (C/E) mode, and select [Diag. Menu Fault Diag.] in the same hierarchical level using the " ↓ " key.
2. Select the [Fault Diag. DC140 Monitor] screen in a lower level using the " → " key.
3. Select [Fault Diag. DC355 HDD DIAG] in the same hierarchical level using the " ↓ " key.
4. Select the [DC355 HDD DIAG Read Verify Test] screen using the " → " key.
5. Select [DC355 HDD DIAG Fault Diag.] in the same hierarchical level using the " ↓ " key.
6. Show the execution instruction screen [Fault Diag. If OK press SEL] using the " → " key.
7. Execute a fault diagnosis using the "FEED / SELECT" key. During the execution, [Fault Diag. In progress] is shown.
    - When the execution has been completed normally, the [Fault Diag. Completed] screen is shown.
    - When the execution has been completed abnormally, the [Fault Diag. Completed abnormally] screen is shown.

NOTE

If the process is completed abnormally, this means that HDD is defective. In this case, replace the HDD PWB with a new one (PL5.4). If the process is completed abnormally even though HDD PWB has been replaced, replace the HDD Assy (PL5.4) with a new one.

8. Press the "MENU" key to return to the common menu screen [Diag. Menu Fault Diag.].

<Fault Prediction>

Procedure:

1. Enter the Diag (C/E) mode, and select [Diag. Menu Fault Diag.] in the same hierarchical level using the " ↓ " key.
2. Select the [Fault Diag. DC140 Monitor] screen in a lower level using the " → " key.
3. Select [Fault Diag. DC355 HDD DIAG] in the same hierarchical level using the " ↓ " key.
4. Select the [DC355 HDD DIAG Read Verify Test] screen using the " → " key.
5. Select [DC355 HDD DIAG Fault Diag.] in the same hierarchical level using the " ↓ " key.
6. Show the execution instruction screen [Fault Diag. If OK press SEL] using the " → " key.
7. Execute a failure prediction using the "FEED / SELECT" key. During the execution, [Fault Diag. In progress] is shown.
    - When the execution has been completed normally, the [Fault Diag. Completed] screen is shown.

- When the execution has been completed abnormally, the [Fault Diag. Completed abnormally] screen is shown.

NOTE

If the process is completed abnormally, this means that HDD has been at the end of its useful life. In this case, replace the HDD Assy (PL5.4) immediately with a new one.

8. Press the "MENU" key to return to the common menu screen [Diag. Menu Fault Diag.].

Reference <HDD partitions and details of their services (functions)>

Partition No.	Default capacity	Service	With HDD	Without HDD	Remarks
1 (A)	4 GB (CE variable)	Form/Logo	Operation 1	Operation 2	Changes the storage destination for the form (ART EX/ART IV) and logo (ART IV), which are registered by a client. HDD capacity is larger. Operation 1: Stores in an applicable area on memory. ART EX form → ART EX form memory ART IV form/logo → ART IV form memory operation Operation 2: Stores in HD.
1 (A)	4 GB (CE variable)	Media print	Operation 1	Operation 2	Stores a file to be printed in a (ART EX) form registration area. Operation 1: Stores in an applicable area on memory. Operation 2: Stores in HD * HDD is required to output high resolution photograph using DocuPrint C2425 with a standard memory capacity (64 MB). If DocuPrint C2426 or C2425 is equipped with an additional 256 MB of memory, 2 MB of applicable area is reserved automatically. So, any compressed image can be output in high resolution whether HDD is used or not. (However, HDD is required to output an uncompressed image.)
2 (B)	4 GB (CE variable)	Print	Operation 1	Operation 2	Changes a print image process. Operation 1: Puts expanded data on memory in Printer Service. (The process up to decomposition and IOT output process are executed in synchronism with each other.) Operation 2: Stores expanded data in Printer Service temporarily. (The process up to decomposition and IOT output process can be executed in asynchronism with each other.)
2 (B)	4 GB (CE variable)	Electronic sort	Operation 1	Operation 2	Changes an electronic sort method. Because the data for the specified number of sheets does not need to be transferred, this service is good for performance, etc. Operation 1: Transmits the data for the specified number of sheets. (ART EX Printer Driver only) Operation 2: Collates the data used in Operation 1.

Partition No.	Default capacity	Service	With HDD	Without HDD	Remarks
2 (B)	4 GB (CE variable)	Ejection in reverse order (Side Tray)	Operation 1	Operation 2	Ejects paper to the Side Tray in reverse order. Operation 1: Transmits data in reverse order. (ART EX Printer Driver only) Operation 2: Stores data in HD once and ejects paper in reverse order.
3 (C)	4 GB (CE variable)	Security print	Not available	Available	Makes security printing available.
3 (C)	4 GB (CE variable)	Sample print	Not available	Available	Makes sample printing available.
3 (C)	4 GB (CE variable)	Delay print	Not available	Available	Prints at a specified time. Introduced into the AP or MN product only, at this moment.
4 (D)	3 GB (CE variable)	PDL and others	Operation 1	Operation 2	Stores received PDL when [HD spool] is set in the memory setting (spooling to HD becomes available). HDD spool capacity is larger than memory spool capacity. Operation 1: Selects either [not spool] or [memory spool]. Operation 2: Selects either [not spool], [memory spool] or [HD spool].
4 (D)	3 GB (CE variable)	E-mail print	Not available	Available	Spools received e-mail data. E-mail can be printed.
4 (D)	3 GB (CE variable)	Adobe PDF	Operation 1	Operation 2	Stores received PDF files. Operation 1: Stores in PS memory. Operation 2: Stores in HD.
4 (D)	3 GB (CE variable)	PS font	Not available	Available	Downloads fonts from a client and stores them.
5 (E)	0.1 GB (Fixed)	Not used			
6 (F)	3 GB (CE variable)	SMB folder	Not available	Available	Stores the device (ESS) setting file (config.txt). (The setting can be changed by editing this file and rebooting.) A printer drive can be stored and downloaded into a client.
7 (G)	0 GB (Fixed)	Not used			
8 (H)	0.5 GB (Fixed)	Spool cont. information	Not available	Available	Stores the internal information for Spool cont. operation.Makes spool cont. available.
8 (H)	0.5 GB (Fixed)	Log	Operation 1	Operation 2	Stores many logs. Log storage capacity increases. Operation 1: NVM only. Operation 2: NVM + HD

DC612 PatternPrt

Description: Prints a test pattern output from a pattern generator built into the machine.

NOTE

- **The message that printing is in progress is displayed on the message area during pattern output.**
- **Perform jam/fail detection. If any error is detected, an operation stops in the same way as the normal mode, but a message of Recovery is not shown. If a failure occurs, a chain-link No. is shown, but History is disabled.**

<Changing a setting item>

NOTE

Prepare paper in the tray in advance.

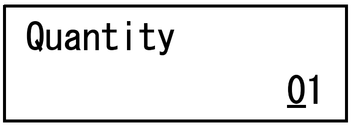
Procedure:

1. Enter the Diag (C/E) mode, and select [Diag. Menu Fault Diag.] in the same hierarchical level using the " ↓ " key.
2. Select the [Fault Diag. DC140 Monitor] screen in a lower level using the " → " key.
3. Select [Fault Diag. DC612 PatternPrt] in the same hierarchical level using the " ↓ " key.
4. Select the setting item screen [DC612 PatternPrt Qty 01] using the " → " key.

NOTE

If you want to execute an output without changing any setting item, press the " ↓ " key several times until [DC612 PatternPrt If OK press SEL] is shown, and press the "FEED / SELECT" key to execute a test pattern output.

5. Show the number of copies screen using the " → " key.



Quantity
01

6. Specify the number of copies to output.
   - To set the number of copies, move the cursor using the " ← " or " → " key and change a numerical value using the " ↑ " or " ↓ " key.

NOTE

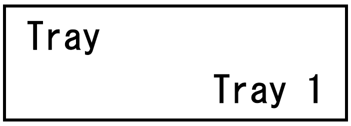
When the cursor is positioned at the left end of the copies field, pressing the " ← " key allows you to return to the [DC612 PatternPrt Qty 01] screen in an upper hierarchical level.

7. The number of copies is fixed by pressing the "FEED / SELECT" key. Then, "*" is marked at the right end of the copies field.
8. Select the setting item screen [DC612 PatternPrt Tray Tray 1] using the " ↑ " or " ↓ " key.

NOTE

If you want to execute an output without changing any setting item, press the " ↓ " key several times until [DC612 PatternPrt If OK press SEL] is shown, and press the "FEED / SELECT" key to execute a test pattern output.

9. Show the tray change screen using the " → " key.



```
Tray
          Tray 1
```

10. Specify the tray to which to output paper using the " ↑ " or " ↓ " key.
11. The tray is fixed by pressing the "FEED / SELECT" key. Then, "*" is marked at the right end of the tray field.
12. Show the execution instruction screen [DC612 PatternPrt If OK press SEL] using the " ↑ " or " ↓ " key.
13. Execute a test pattern print using the "FEED / SELECT" key. During the execution, [DC612 PatternPrt In progress] is shown.
    - If you want to stop printing a test pattern, use the "CANCEL" key.
14. After the execution has been completed, the [DC612 PatternPrt If OK press SEL] screen is shown again.
15. Press the "MENU" key to return to the common menu screen [Diag. Menu Fault Diag.].

2. Service Data

2.1 DC330 Input Component Check List

001-100
SENSOR/SWITCH CHECK
[Indication] H/L
[Description]
The number of sensor check counts. This is not for a particular sensor. Whichever sensor is checked, it is counted.

2.2 DC330 Output Component Check List

008-001
MAIN MOTOR
[Description]
Drives the main motor.

008-002
EXIT MOTOR, CW, NORMAL SPEED
[Description]
Drives the Exit Motor at a normal speed.

008-003
EXIT MOTOR, CCW, HIGH SPEED
[Description]
Drives the Exit Motor at a double speed in a reverse direction.

008-004
EXIT MOTOR, CCW, NORMAL SPEED
[Description]
Drives the Exit Motor at a normal speed in a reverse direction.

008-005
DUPLEX MOTOR, CW, HIGH SPEED
[Description]
Drives the Duplex Motor at a double speed.

008-006
DUPLEX MOTOR, CW, NORMAL SPEED
[Description]
Drives the Duplex Motor at a normal speed.

008-007
Tray1 FEEDER CLUTCH
[Description]
Turns on the Tray1 Feed Clutch which supplies a driving force to the Feed Roll that carries papers from the Tray1.

008-008
Tray2 FEEDER CLUTCH
[Description]
Turns on the Tray2 Feed Clutch which supplies a driving force to the Feed Roll that carries papers from the Tray2.

008-009

Tray3 FEEDER CLUTCH

[Description]

Turns on the Tray3 Feed Clutch which supplies a driving force to the Feed Roll that carries papers from the Tray3.

008-010

Tray4 FEEDER CLUTCH

[Description]

Turns on the Tray4 Feed Clutch which supplies a driving force to the Feed Roll that carries papers from the Tray4.

008-011

REGISTRATION ROLL CLUTCH

[Description]

Turns on the Regi. Clutch which supplies a motor driving force to the Regi. Roll.

008-012

OCT MOTOR

[Description]

Drives the OCT Motor.

008-013

OCT OFFSET

[Description]

Drives the OCT offset.

008-014

OPTION DIRECTION SOLENOID

[Description]

Turns on/off the solenoid for switching a paper feed path.

008-015

TRAY3 FEEDER MOTOR

[Description]

Drives the Tray3 Feeder Motor.

008-016

TRAY4 FEEDER MOTOR

[Description]

Drives the Tray4 Feeder Motor.

008-017

TRAY3 FEEDER TURN ROLL CLUTCH

[Description]

Turns on the Turn Clutch which supplies a driving force to the Turn Roll that carries papers from the Tray3.

008-018

TRAY4 FEEDER TURN ROLL CLUTCH

[Description]

Turns on the Turn Clutch which supplies a driving force to the Turn Roll that carries papers from the Tray4.

009-001

PRESSURE ROLL DC BIAS

[Description]

Applies a DC negative voltage to the Pressure Roll.

009-002
CHARGE ROLL AC
[Description]
Applies an AC voltage to the Bias Charge Roll (BCR).

009-003
CHARGE ROLL DC
[Description]
Applies a DC voltage to the Bias Charge Roll (BCR).

009-004
DEVELOPER BIAS AC
[Description]
Applies an AC voltage to the Developer Magnetic Roll.

009-005
DEVELOPER BIAS DC
[Description]
Applies a DC voltage to the Developer Magnetic Roll.

009-006
TRANSFER ROLL -
[Description]
Applies a DC negative voltage to the Transfer Roll.

009-007
TRANSFER ROLL +
[Description]
Applies a DC positive voltage to the Transfer Roll.

009-008
DETACK SAW
[Description]
Applies a voltage to the Detack Saw.

009-009
ROS MOTOR
[Description]
Drives the polygon motor in ROS.

009-010
LASER DIODE
[Description]
Checks that the laser diode emits light.

009-011
PRESSURE ROLL DC BIAS +
[Description]
Applies a DC positive voltage to the Pressure Roll.

010-001
FAN MOTOR STOP
[Description]
Checks that the fan stops.

010-002
FAN MOTOR, HIGH SPEED
[Description]
Drives the fan in a high-speed rotation mode.

2.3 DC140 Analog Monitor List

001-300

FUSER TEMPERATURE CHECK

[Description]

Shows a monitored surface temperature value (thermistor output) of the Fuser Heat Roll.

2.4 DC131 NVM R/W

Reads from and writes to NVM.

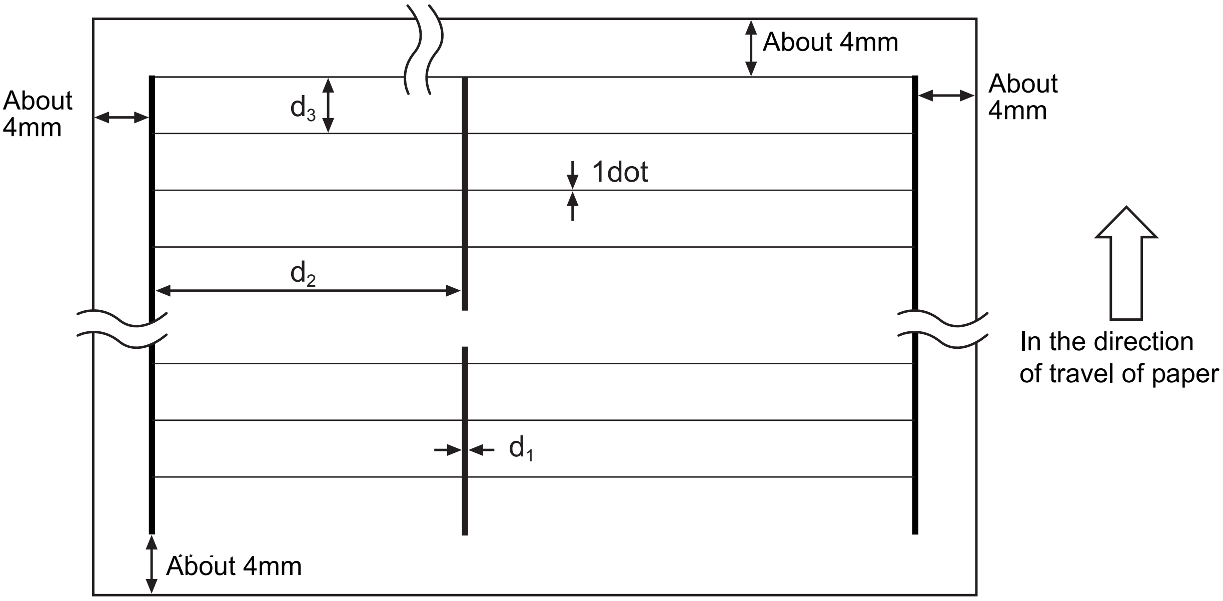
Chain-Link	Content	Size (Reference)	Add	Details
740-001	Configuration1	1 byte	NV 00	bit0: 1 = LowPaperSensor is not available 0 = available bit1: 1 = Toner Sensor is not available 0 = available
740-002	Configuration2	1 byte	NV 01	bit0: 1 = US 0 = JP bit1: 1 = Tray1 detected (Post card) 0 = A5L *(Factory-shipped) bit2: 1 = Long (Enabled) 0 = Disabled *(Factory-shipped) bit3: 1 = Tray1 (SSI) 0 = 150CST
740-003	Configuration3	1 byte	NV 02	Reserve
740-004	Resolution	1 byte	NV 03	0: 600dpi 1: 1200dpi
740-005	LD Power	1 byte	NV 04	0-7: Adjustment value of Laser Diode output (4 = initial)
740-006	Print Density	1 byte	NV 05	0-15: Adjustment value of Print Density (8 = initial)
740-007	VDO1/VDO2 time lag	1 byte	NV 06	0-15: Adjustment value of VDO1/VDO2 time lag (6 = initial)
740-008	Adjustment Option	1 byte	NV 07	bit0: 1 = DB-AC mode 2 0 = DB-AC mode 1
740-009	Interface Option (REG code WRITE)	1 byte	NV 08	bit0-2:Reserved bit3: 1 = REG code WRITE enable 0 = disable (initial)
741-001	REG Process MSI	1 byte	RG 00	0-15: (8 = initial) Adjustment Value of Paper Feed Direction (MSI). Rewritable if 740-009 Bit3 is 1.
741-002	REG Process T1	1 byte	RG 01	0-15: (8 = initial) Adjustment Value of Paper Feed Direction (Tray1). Rewritable if 740-009 Bit3 is 1.
741-003	REG Process T2	1 byte	RG 02	0-15: (8 = initial) Adjustment Value of Paper Feed Direction (Tray2). Rewritable if 740-009 Bit3 is 1.
741-004	REG Process T3	1 byte	RG 03	0-15: (8 = initial) Adjustment Value of Paper Feed Direction (Tray3). Rewritable if 740-009 Bit3 is 1.
741-005	REG Process T4	1 byte	RG 04	0-15: (8 = initial) Adjustment Value of Paper Feed Direction (Tray4). Rewritable if 740-009 Bit3 is 1.

Chain-Link	Content	Size (Reference)	Add	Details
741-006	REG Process Dup	1 byte	RG 06	0-15: (8 = initial) Adjustment Value of Paper Feed Direction (Duplex) Rewritable if 740-009 Bit3 is 1.
741-007	REG Scan MSI	1 byte	RG 07	0-15: (8 = initial) Adjustment Value of Paper Scan Direction (MSI) Rewritable if 740-009 Bit3 is 1.
741-008	REG Scan T1	1 byte	RG 08	0-15: (8 = initial) Adjustment Value of Paper Scan Direction (Tray1) Rewritable if 740-009 Bit3 is 1.
741-009	REG Scan T2	1 byte	RG 09	0-15: (8 = initial) Adjustment Value of Paper Scan Direction (Tray2) Rewritable if 740-009 Bit3 is 1.
741-010	REG Scan T3	1 byte	RG 0A	0-15: (8 = initial) Adjustment Value of Paper Scan Direction (Tray3) Rewritable if 740-009 Bit3 is 1.
741-011	REG Scan T4	1 byte	RG 0B	0-15: (8 = initial) Adjustment Value of Paper Scan Direction (Tray4)
741-012	REG Scan Dup	1 byte	RG 0D	0-15: (8 = initial) Adjustment Value of Paper Scan Direction (Duplex) Rewritable if 740-009 Bit3 is 1.
741-013	REG Process Thick	1 byte	RG 0E	0-15: (8 = initial) Adjustment Value of Paper Feed Direction (Thick Paper)
743-001	Total number of printing faces in CRU	2 bytes	CR 12,13	Total number of printing faces (IOT count)
743-002	Number of printed faces after XERO Warning occurs	2 bytes	CR ? (00-0B)	Number of printed faces after Toner Near Empty (Cont. count)
743-003	Number of printed pixel counting 1 (4-1 byte)	4 bytes	CR ? (00-0B)	Pixel counting for Toner Gas Gage (Cont. count)Low
743-004	Number of printed pixel counting 2 (6-5 byte)	2 bytes	CR ? (00-0B)	Pixel counting for Toner Gas Gage (Cont. count)High
744-001 to 744-009	For accessing all areas of NVM-NV Code	1 byte	NV XX	All area access for extension (IOT-NV (Other areas))
745-001 to 745-015	For accessing all areas of NVM-REG Code (00-0E)	1 byte	RG XX	All area access for extension (IOT-NV (Regi. areas))
746-001 to 746-007	For accessing all areas of NVM-User Free Area (00-06)	1 byte		All area access for extension (IOT-NV (User-defined areas))
747-001 to 747-064	For accessing all areas of CRU DATA-INFO Code (00-3F)	1 byte	CR XX	All area access for extension (CRU-NV)

2.5 TEST PATTERN MODE MENU

2.5.1 Functions

A test print pattern incorporated in the printer and used for operation check can be printed.
A test print pattern is shown below.


About 4mm
About 4mm
About 4mm
About 4mm
d_3
1dot
d_2
d_1
In the direction of travel of paper

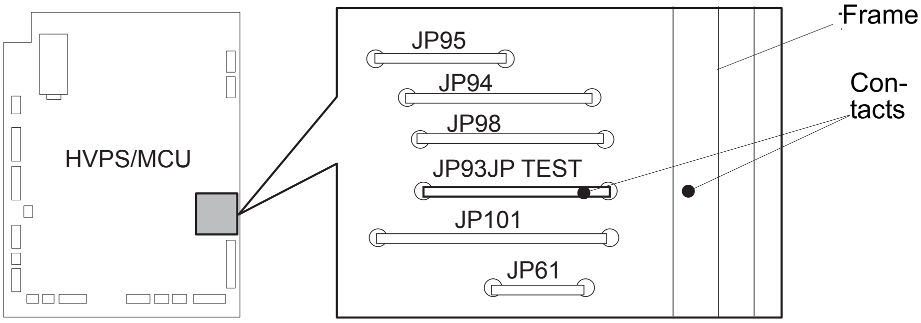
JG2007AA

Resolution	d_1 (dot)	d_2 (dot)	d_3 (dot)
600 dpi	About 24	About 2454	127
1200 dpi	About 48	About 4908	63

The d_2 value in the table is in the case of a letter-size output.

The vertical lines of a test print pattern may be printed out in a jagged fashion since there is no jitter control.

A test pattern can be printed by short-circuiting the test print pin (JP TEST) and the frame on the board (MCU).


HVPS/MCU
JP95
JP94
JP98
JP93JP TEST
JP101
JP61
Frame
Con-tacts

JG2008AA

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Chapter 3 Removal and Replacement Procedures (RRPs) CONTENTS

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1. Removal and Replacement Procedures

Parts removal and replacement procedures are described in major 12 items which correspond to classification of parts list.

RRP1	Cover
RRP2	150 Paper Cassette
RRP3	250 Paper Cassette
RRP4	550 Paper Cassette
RRP5	150 Paper Feeder
RRP6	250 Paper Feeder
RRP7	550 Paper Feeder
RRP8	Xero
RRP9	250 Paper Exit
RRP10	500 Paper Exit
RRP11	Frame & Drive
RRP12	Electrical

NOTE

Parts are controlled as spare parts. When servicing for parts for which no procedures are described, observe their assembling condition before starting the service.

NOTE

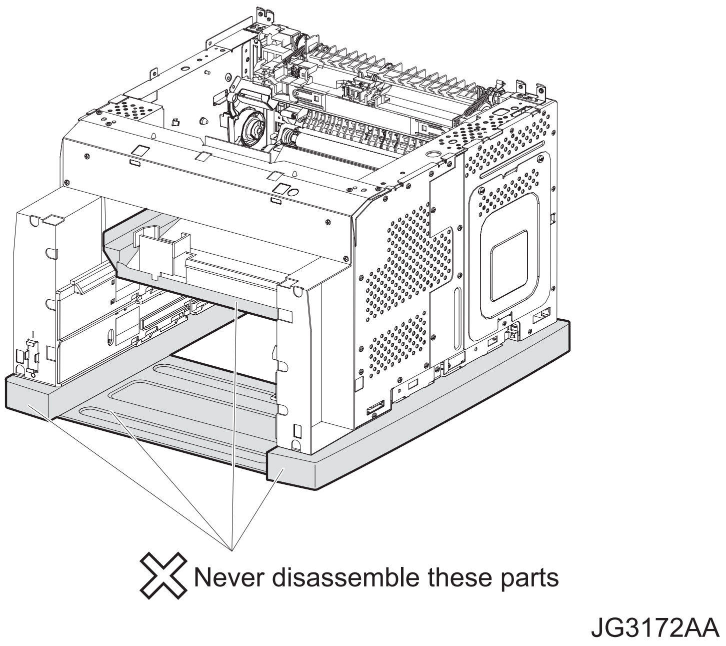
Though the optional parts are assumed to be removed, they may not be removed if not required for the purpose of service operation.

1.1 Before starting service work

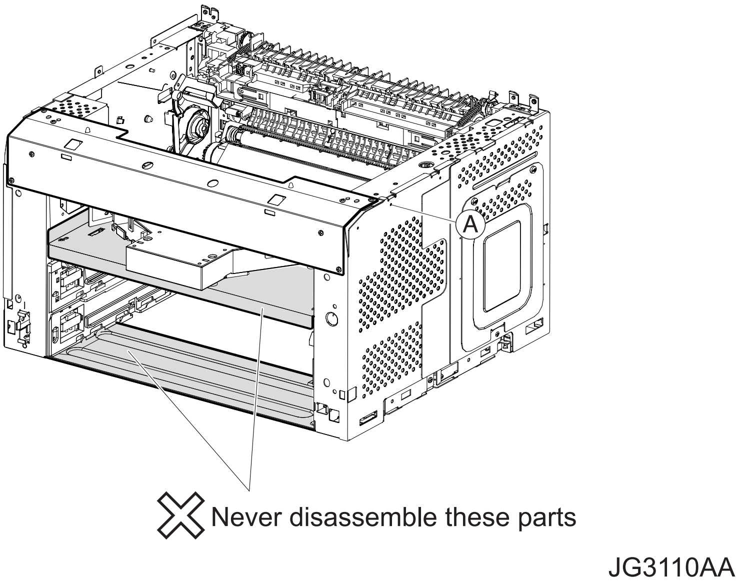
- Turn the power OFF and remove the power cord from the electric outlet.
- When performing service operation for parts around the FUSER ASSY, start the service after the FUSER ASSY and parts around it have cooled down.
- Do not give forcible power to prevent damage of parts or functions.
- Since a wide variety of screws are used, be careful not to mistake their positions, to prevent crushing of the screw holes or other troubles.
- Wear a wrist band or the like as far as possible to remove static electricity of the human body.
- Remove the 150 Paper Cassette, 550 Paper Cassette/250 Paper Cassette and EP CARTRIDGE, and place them where the service is not disturbed.

1.2 Prohibited matter

Do not remove the frame components shown in the figure below. Removing any of these components will make the laser printer go out of alignment. If the frame components are removed or thier screws loosened by mistake, be sure to replace them again on a stable and firm horizontal work surface.


Never disassemble these parts
JG3172AA

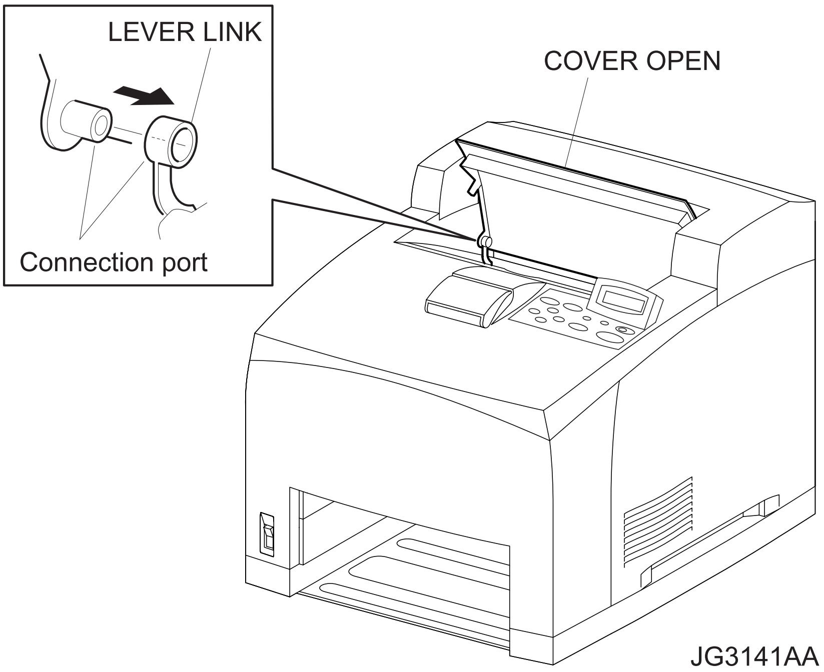
(34PPM)


A
Never disassemble these parts
JG3110AA

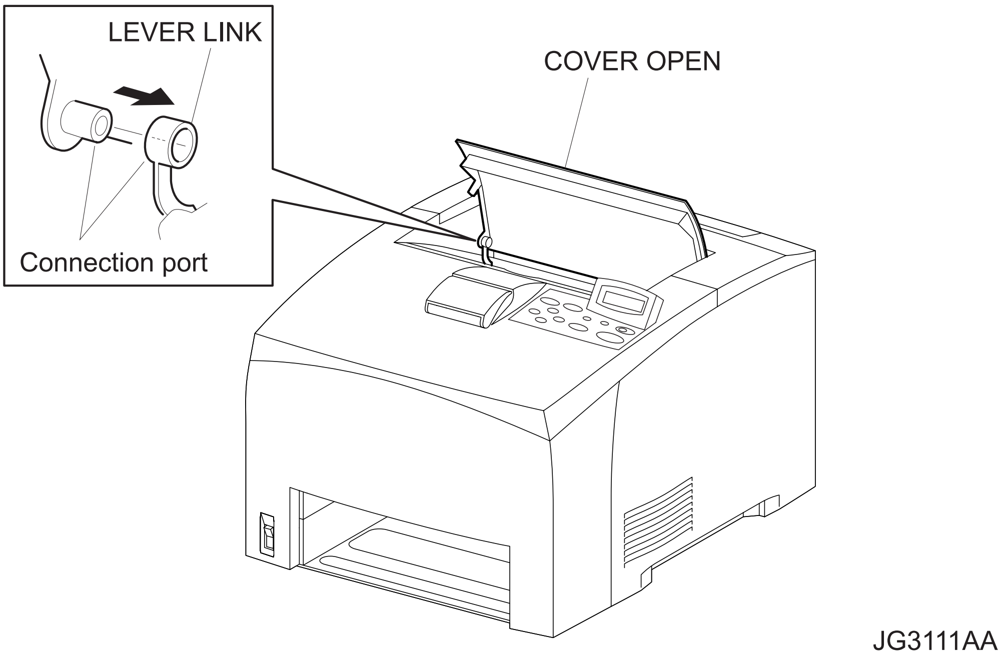
(24PPM)

1.3 Confirmation after service

After a service, confirm that the COVER OPEN and the LEVER LINK are connected properly, and confirm the operation of the COVER OPEN by opening and closing it.


LEVER LINK
COVER OPEN
Connection port
JG3141AA

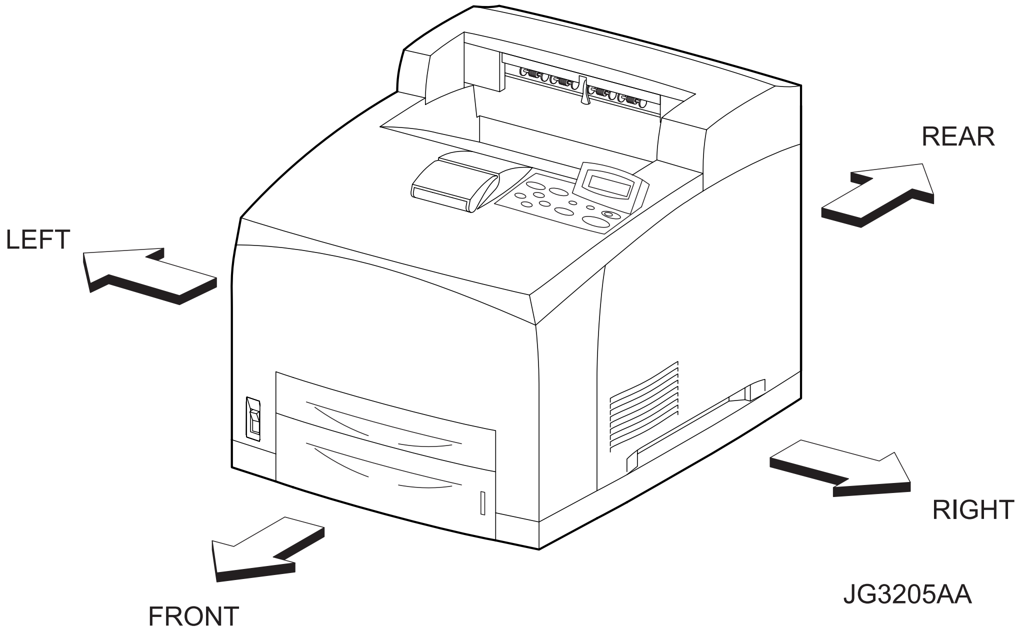
(34PPM)


LEVER LINK
COVER OPEN
Connection port
JG3111AA

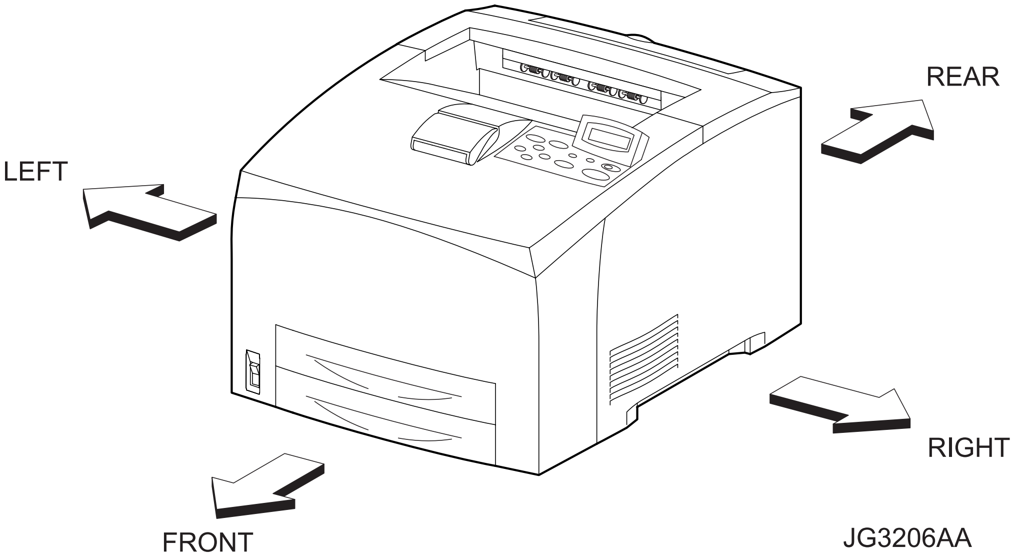
(24PPM)

1.4 Description of procedures

- "RRP X,Y "AAAAA" at the top of procedures represent the part name AAAAA are to be removed and replaced.
- "(PL X.Y.Z)" following the parts name in procedures represent that the parts are those of the plate (PL) "X.Y", item "Z" in Chapter 5, Parts List. Their forms, replacing position or other conditions can be seen in Chapter 5, Parts List.
- In the procedures, directions are represented as follows.
  - Front: Front when you are facing the front of this laser printer.
  - Rear: Inner direction when you are facing the front of this laser printer.
  - Left: Left hand when you are facing the front of this laser printer.
  - Right: Right hand when you are facing the front of this laser printer.



(34PPM)

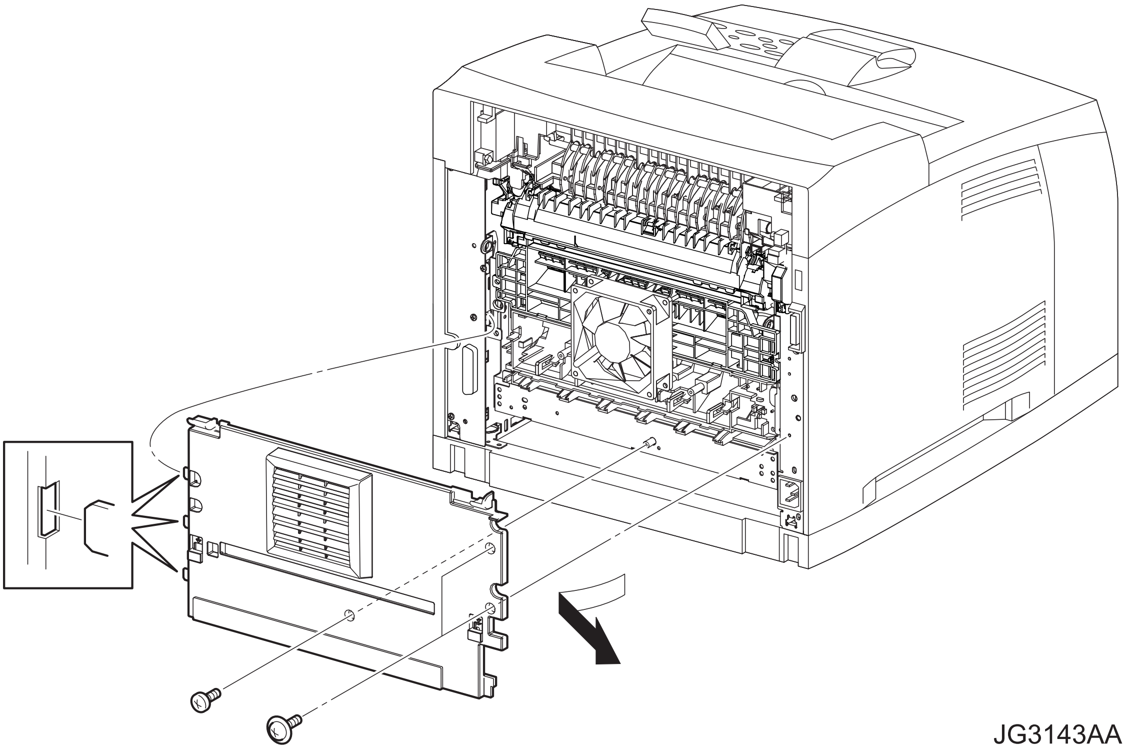


(24PPM)

- The screws in procedures are expressed with their replacing position, color, characteristics and nominal length, etc.
- “ In case of _____ specifications" in the procedures indicate that service operation should be provided only to laser printer of specified specifications (service operation should not be provided for laser printer of specifications not covered).
- "RRP X.Y" in the midst or at the end of sentences in the procedures indicate that work procedures related with the "RRP X.Y" are described.
- "Figure X.Y" at the end of the sentences of procedures indicate that illustrations instructive for the "RRP X.Y" are included.
- "Z)" in the illustrations correspond to "Z)" of the service procedures.
- The screws in the illustrations should be removed using a plus (+) screwdriver unless otherwise specified.
- A black arrow in the illustrations indicate movement in the arrow mark direction.
  Numbered black arrows indicate movement in the order of the numbers.
- White arrows (FRONT) in the illustrations indicate the front direction.
- For the positions of the connectors (P/J), refer to Chapter 7, Electric wiring.

RRP1. Cover

RRP1.1 COVER REAR (PL1.1.3)



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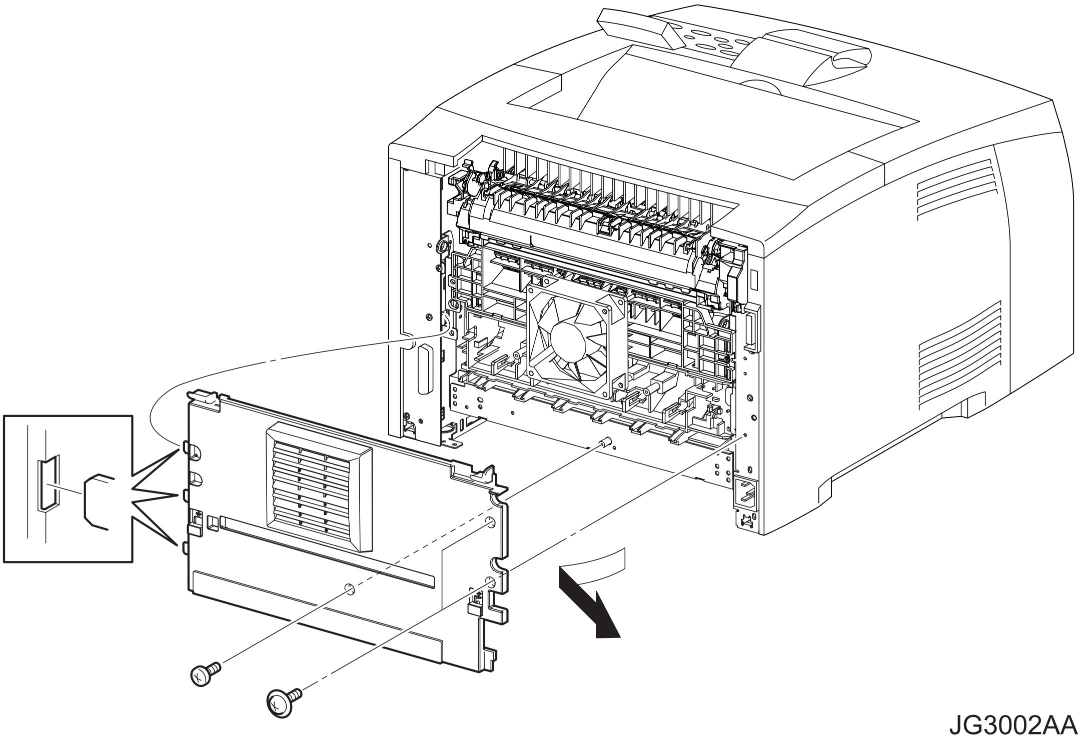

(24PPM)

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
2) Remove the 3 screws (silver with flange, 8mm x 2, gold tapping, 8mm x 1) securing the COVER REAR to the printer.
3) Open the COVER REAR in the direction of the arrow. Release the 3 hooks securing the COVER REAR to the printer, and remove it from the printer.

Replacement

1) Insert the 3 hooks on the left side of the COVER REAR into the 3 holes of the printer.
2) Secure the COVER REAR to the printer using the 3 screws (silver with flange, 8mm x 2, gold tapping, 8mm x 1).

NOTE

There are 2 kinds of screws, make sure they are put in the right place.
When tightening the screws be careful not to pinch the harness between the boad and frame.

3) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)

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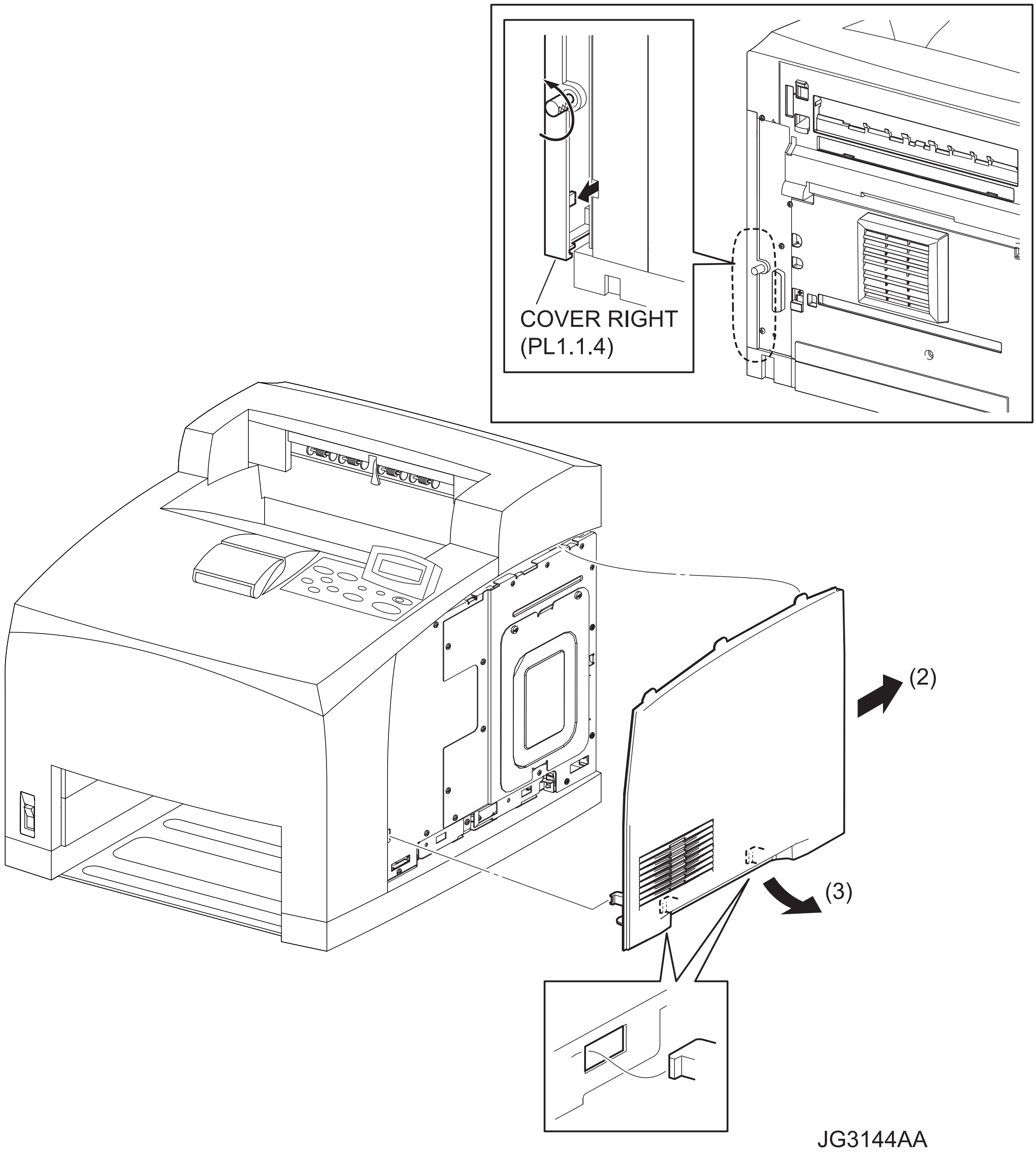
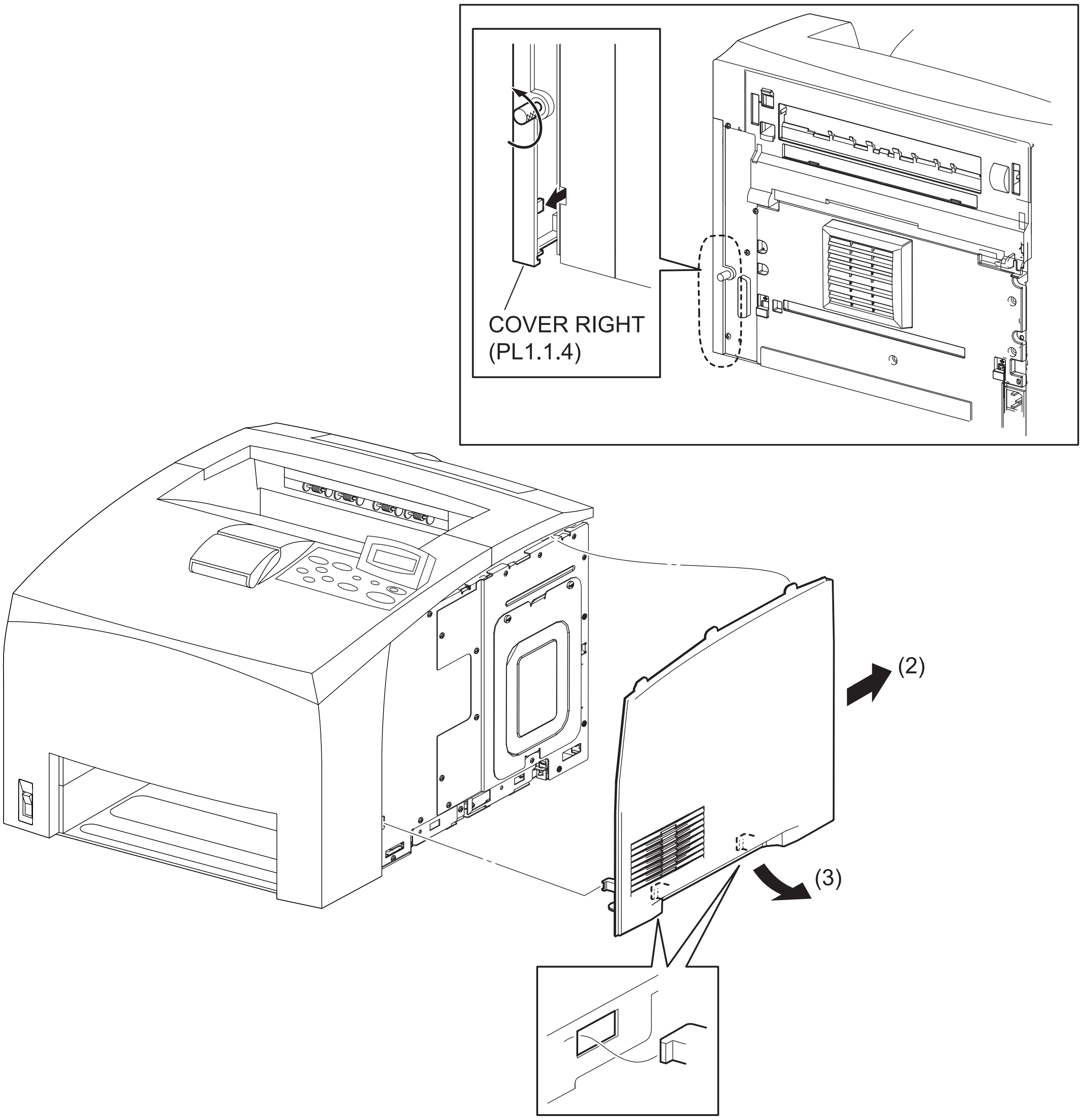
RRP1.2 COVER RIGHT (PL1.1.4)


COVER RIGHT
(PL1.1.4)
(2)
(3)
JG3144AA

(34PPM)


COVER RIGHT
(PL1.1.4)
(2)
(3)

JG3003AA

(24PPM)

Removal

1) Loosen the screw securing the COVER RIGHT to the rear side of the printer.
2) Shift the COVER RIGHT in the direction of the arrow to release the 4 hooks, two below, one in front and one on rear, securing the COVER RIGHT to the printer.
3) Shift the COVER RIGHT downward to release the 3 hooks securing the top of it, and remove the COVER RIGHT from the printer.

Replacement

1) Shift the COVER RIGHT upward to lock the 3 hooks to the printer.
2) Shift the COVER RIGHT frontward to secure the 4 hooks, two below, one in front and one on rear, to the printer.
3) Secure the COVER RIGHT to the printer using the screw on the rear side of the printer.

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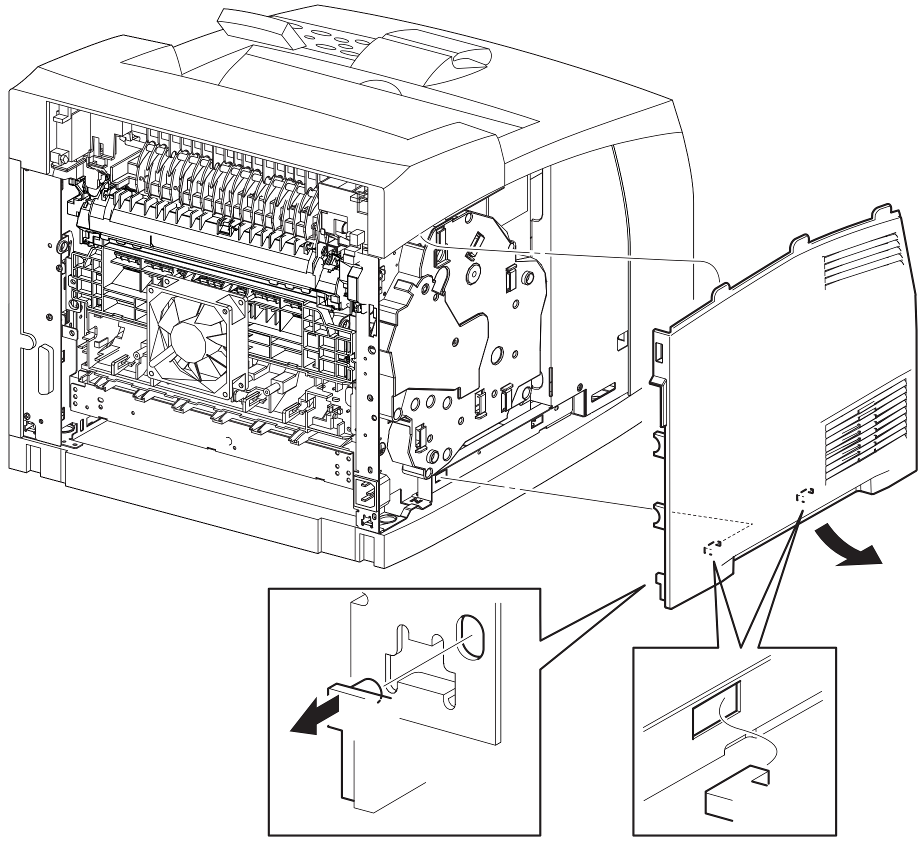
RRP1.3   COVER LEFT (PL1.1.6)



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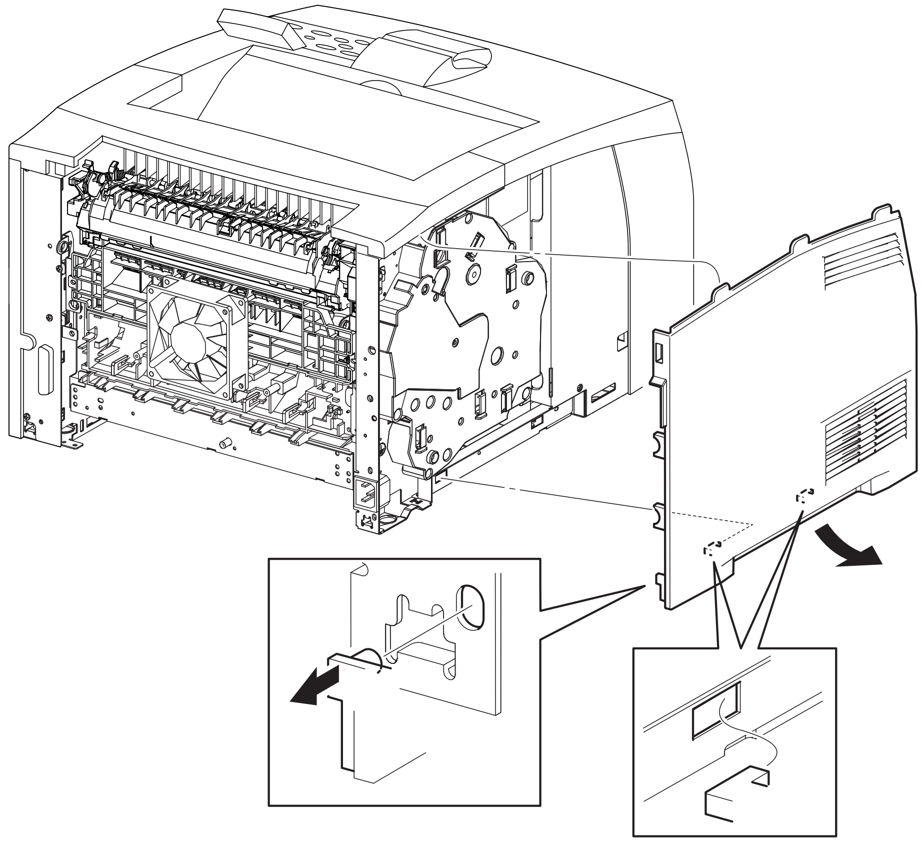

(24PPM)

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Shift the COVER LEFT in the direction of the arrow to release the 4 hooks, two below and two on rear, securing the COVER LEFT to the printer.
4) Shift the COVER LEFT downward to release the 3 hooks securing the top of it, and remove the COVER LEFT from the printer.

Replacement

1) Shift the COVER LEFT upward to lock the 3 hooks to the printer.
2) Shift the COVER LEFT frontward to lock the 4 hooks, two below and two on rear, to the printer.
3) Install the COVER REAR (PL1.1.3) (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

4) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)

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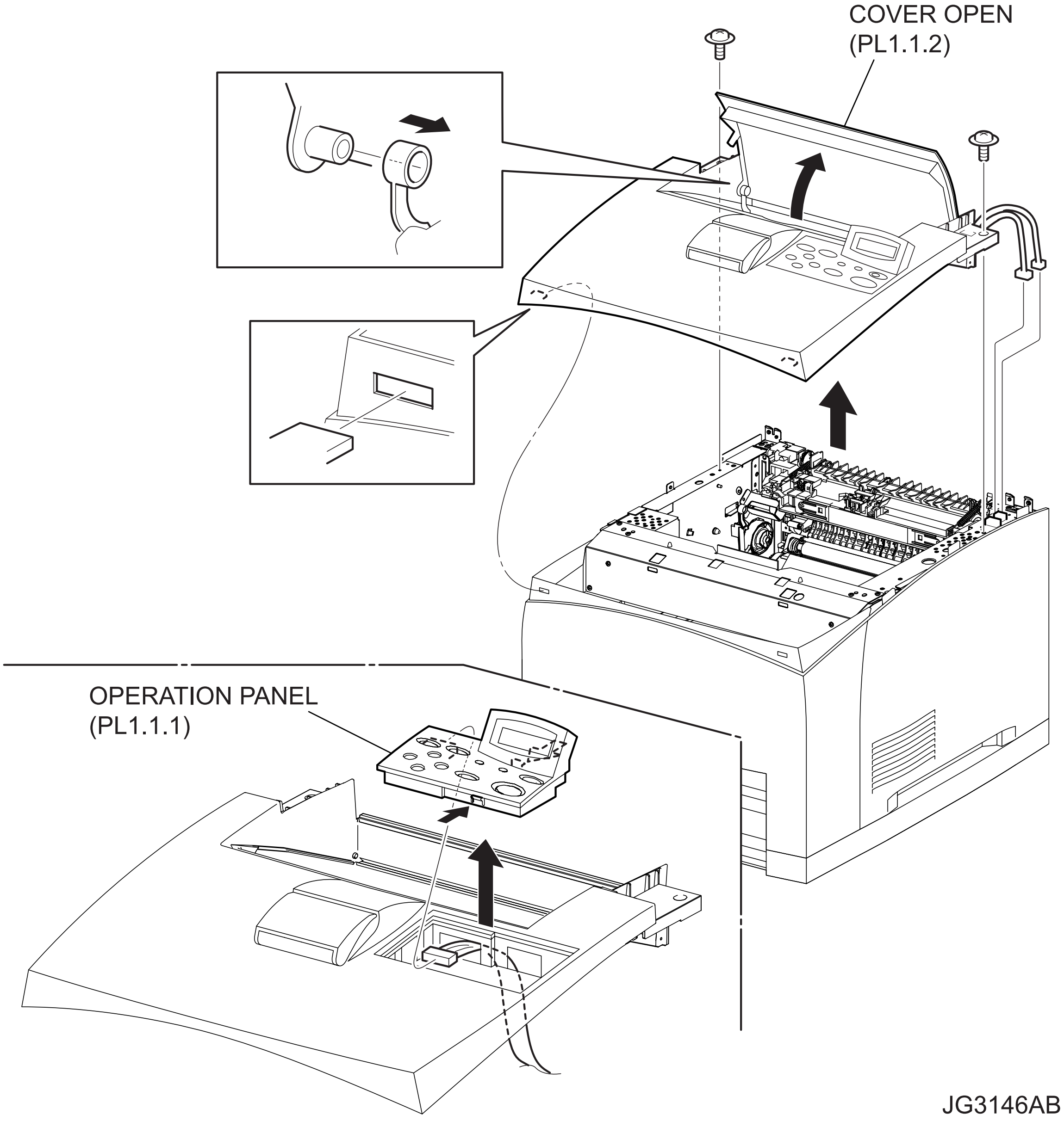
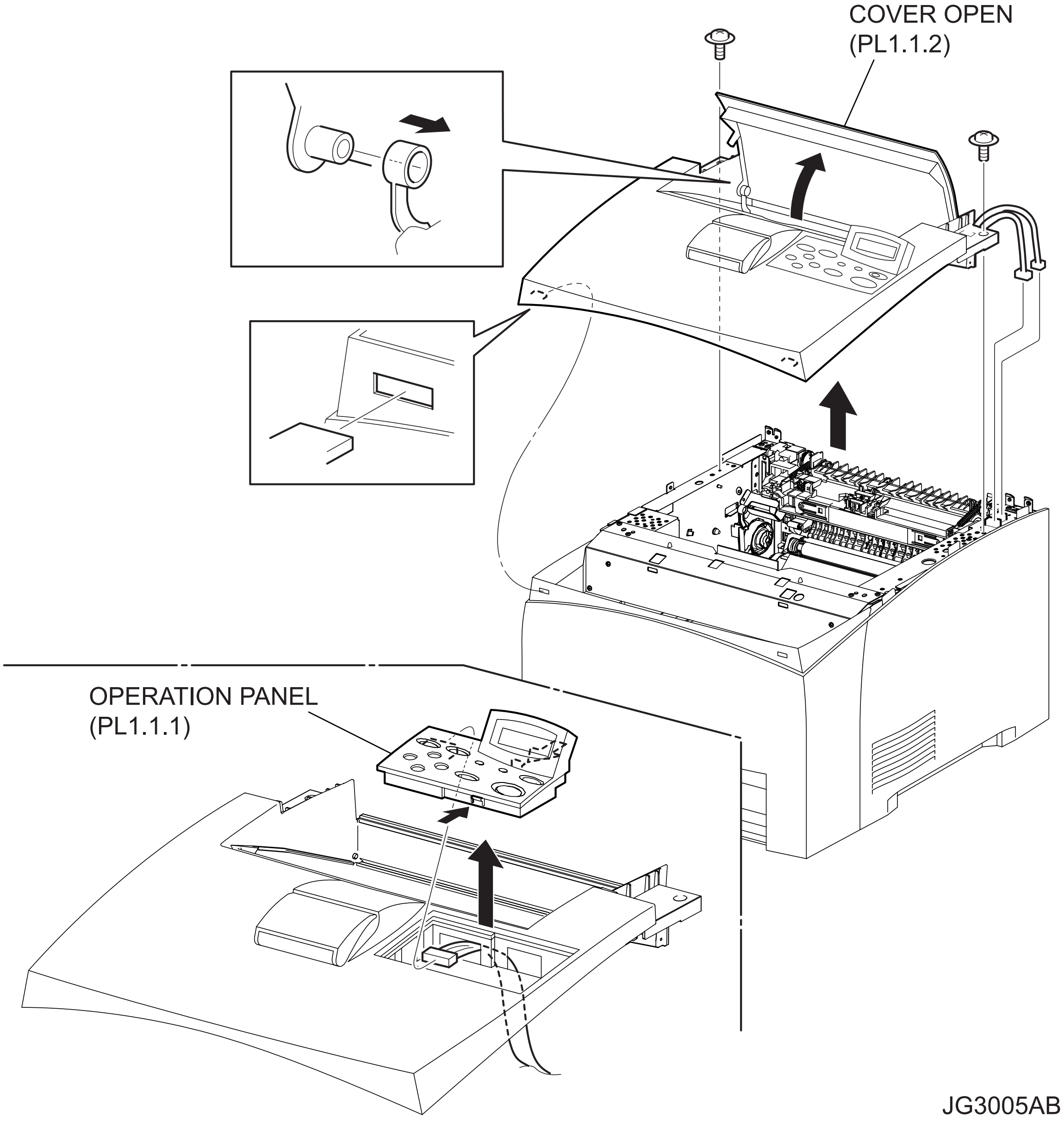
RRP1.4 COVER TOP (PL1.1.7), OPERATION PANEL (PL1.1.1)


COVER OPEN
(PL1.1.2)
OPERATION PANEL
(PL1.1.1)
JG3146AB

(34PPM)


COVER OPEN
(PL1.1.2)
OPERATION PANEL
(PL1.1.1)
JG3005AB

(24PPM)

34PPM

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (PPR1.2)
5) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
6) Remove the 500 EXIT ASSY (PL10.1.2). (RRP10.2)
7) Remove the 2 screws (silver with flange, 8mm) securing the COVER TOP to the printer.
8) Remove the LEVER LINK (PL8.1.29) from the boss of the COVER OPEN (PL1.1.2).

NOTE **When removing the LEVER LINK from the boss of the COVER OPEN, the COVER OPEN is opened, and the LEVER LINK is extended.**

NOTE **In the following steps, do not separate the COVER TOP and the printer too far from the printer, since the OPERATION PANEL (PL1.1.1) attached to the COVER TOP is connected to the printer.**

9) Release the 2 hooks securing the front of the COVER TOP to the COVER FRONT (PL1.1.5), and pull out the COVER TOP slightly away from the printer.
10) Disconnect the connectors (P/J144 and P/J411) of the SWITCH I/L ASSY from the frame connectors.
11) Disconnect the connector (P/J1) of the OPERATION PANEL.
12) Release the harness clampers of the SWITCH I/L ASSY and OPERATION PANEL.
13) Remove the COVER TOP.
14) Release the 2 hooks securing the OPERATION PANEL to the COVER TOP, and remove the OPERATION PANEL.

Replacement

1) Install the OPERATION PANEL to the COVER TOP, and secure it using the 2 hooks.
2) Connect the connector (P/J1) of the OPERATION PANEL.
3) Secure the harnesses with the 2 clampers on the SWITCH I/L ASSY and OPERATION PANEL.
4) Connect the connectors (P/J144 and P/J411) of the SWITCH I/L ASSY to the frame connectors.
5) Install the COVER TOP to the printer, and secure it to the COVER FRONT (PL1.1.5) using the 2 hooks at the front of the COVER TOP.
6) Put the boss of the COVER OPEN (PL1.1.2) into the hole of the LEVER LINK (PL8.1.29).

NOTE **When putting the boss of the COVER OPEN into the hole of the LEVER LINK, the COVER OPEN should be opened, and the LEVER LINK should be extended.**

7) Secure the COVER TOP to the printer using the 2 screws (silver with flange, 8mm).
8) Install the 500 EXIT ASSY (PL10.1.2). (RRP10.2)

NOTE **When installing, put the harnesses of the MOTOR ASSY EXIT and HARNESS ASSY EXIT SNR1 into the square hole of the frame.**

9) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
10) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
11) Install the COVER LEFT (PL1.1.6). (RRP1.3)
12) Install the COVER REAR (PL1.1.3). (RRP1.1)
13) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

24PPM

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
5) Remove the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
6) Remove the 2 screws (silver with flange, 8mm) securing the COVER TOP to the printer.
7) Remove the LEVER LINK (PL8.1.29) from the boss of the COVER OPEN (PL1.1.2).

NOTE **When removing the LEVER LINK from the boss of the COVER OPEN, the COVER OPEN is opened, and the LEVER LINK is extended.**

NOTE **In the following steps, do not separate the COVER TOP and the printer too far from the printer, since the OPERATION PANEL (PL1.1.1) attached to the COVER TOP is connected to the printer.**

8) Release the 2 hooks securing the front of the COVER TOP to the COVER FRONT (PL1.1.5), and pull out the COVER TOP slightly away from the printer.
9) Disconnect the connectors (P/J144 and P/J411) of the SWITCH I/L ASSY from the frame connectors.
10) Disconnect the connector (P/J1) of the OPERATION PANEL.
11) Release the harness clampers of the SWITCH I/L ASSY and OPERATION PANEL.
12) Remove the COVER TOP.
13) Release the 2 hooks securing the OPERATION PANEL to the COVER TOP, and remove the OPERATION PANEL.

Replacement

1) Install the OPERATION PANEL to the COVER TOP, and secure it using the 2 hooks.
2) Connect the connector (P/J1) of the OPERATION PANEL.
3) Secure the harnesses with the 2 clampers on the SWITCH I/L ASSY and OPERATION PANEL.
4) Connect the connectors (P/J144 and P/J411) of the SWITCH I/L ASSY to the frame connectors.
5) Install the COVER TOP to the printer, and secure it to the COVER FRONT (PL1.1.5) using the 2 hooks at the front of the COVER TOP.
6) Put the boss of the COVER OPEN (PL1.1.2) into the hole of the LEVER LINK (PL8.1.29).

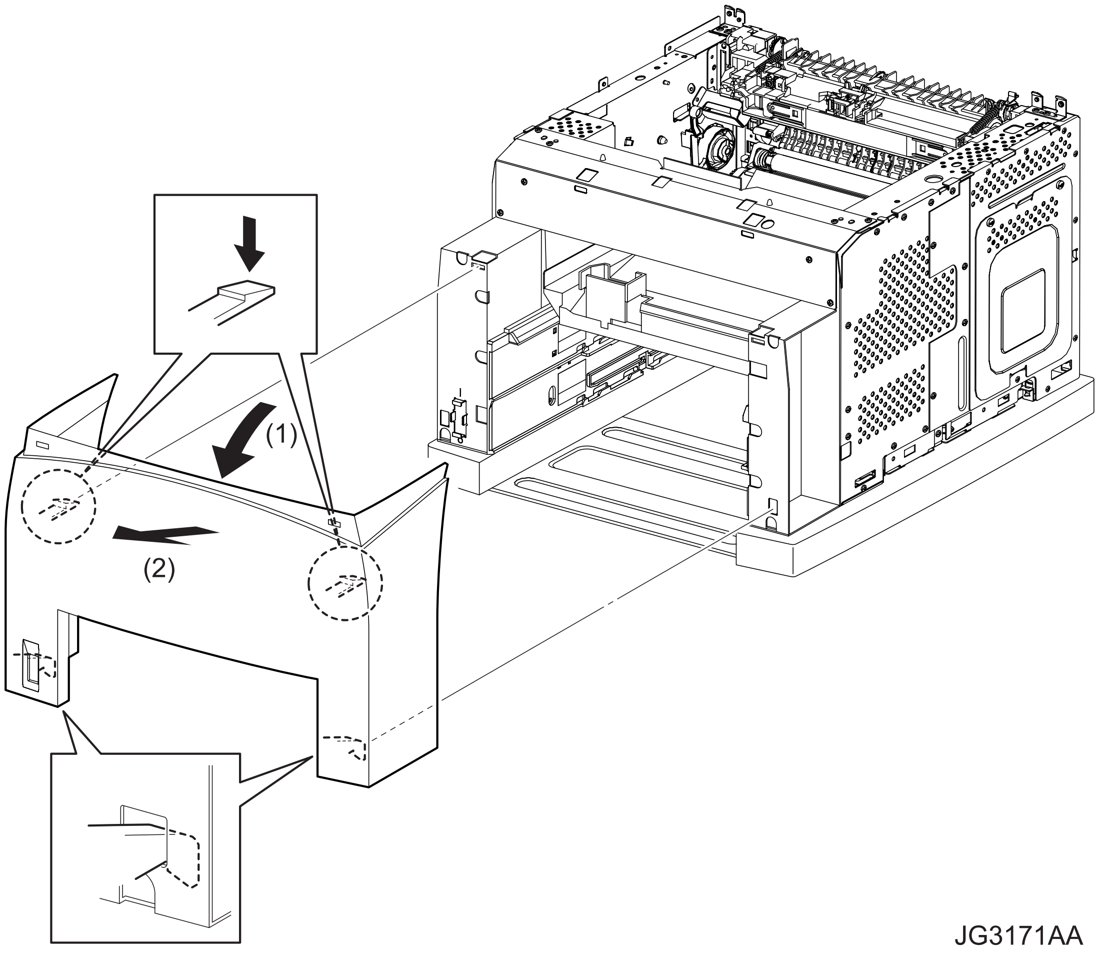
NOTE **When putting the boss of the COVER OPEN into the hole of the LEVER LINK, the COVER OPEN should be opened, and the LEVER LINK should be extended.**

7) Secure the COVER TOP to the printer using the 2 screws (silver with flange, 8mm).
8) Install the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)

NOTE **When installing, put the harness of the MOTOR ASSY EXIT into the square hole of the frame.**

9) Install the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
10) Install the COVER LEFT (PL1.1.6). (RRP1.3)
11) Install the COVER REAR (PL1.1.3). (RRP1.1)
12) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)

RRP1.5   COVER FRONT (PL1.1.5)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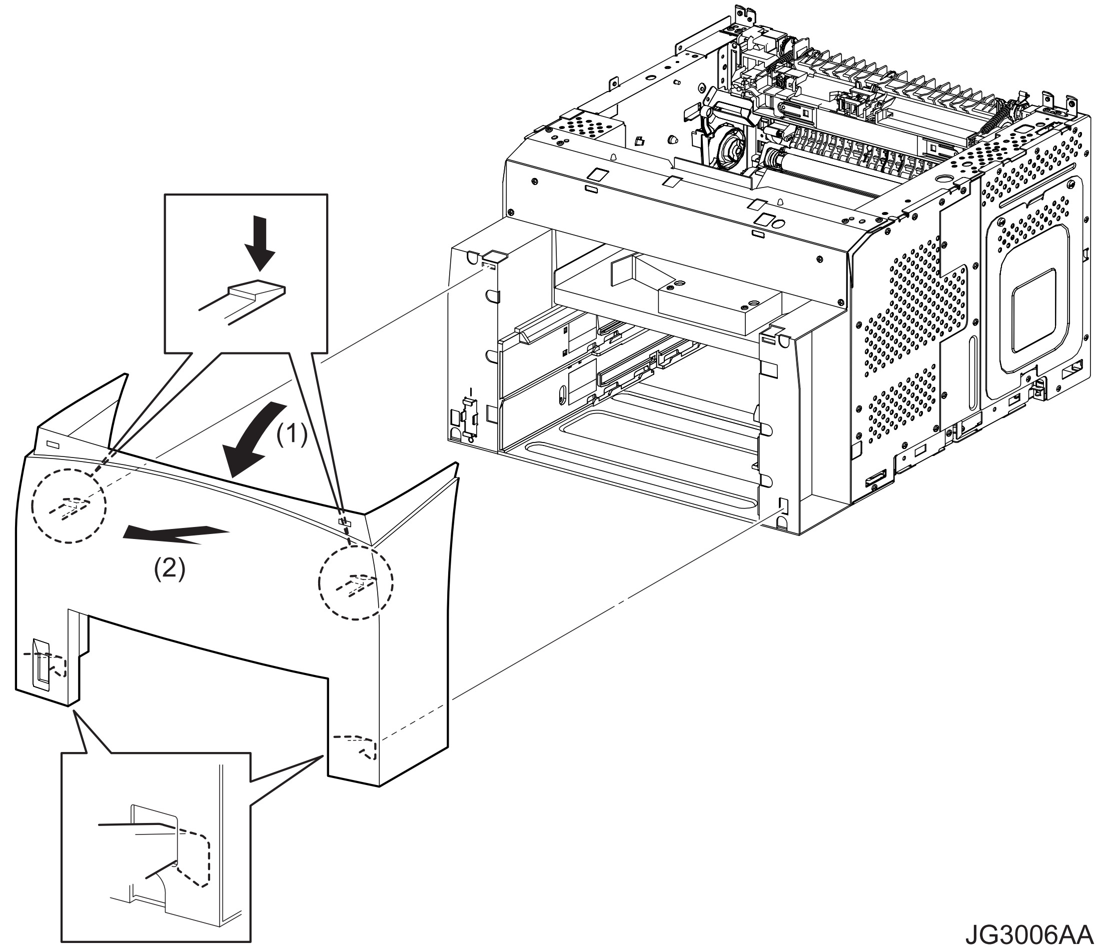
JG3171AA

(34PPM)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(24PPM)

34PPM

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
6) Remove the 500 EXIT ASSY (PL10.1.2). (RRP10.2)
7) Remove the COVER TOP (PL1.1.7). (RRP1.4)
8) Release the 2 hooks of the COVER FRONT securing it to the printer by pressing down the 2 hooks at the upper portion of it, and open it to forward.
9) Shift the COVER FRONT in the direction of the arrows. Remove the COVER FRONT from the printer by releasing the 2 hooks at the lower portion of it.

Replacement

1) Hang the 2 hooks at the lower portion of the COVER FRONT to the printer.
2) Lock the 2 hooks at the upper portion of the COVER FRONT to the printer, and secure it to the printer.
3) Install the COVER TOP (PL1.1.7). (RRP1.4)
4) Install the 500 EXIT ASSY (PL10.1.2). (RRP10.2)

NOTE **When installing, put the harnesses of the MOTOR ASSY EXIT and HARNESS ASSY EXIT SNR1 into the square hole of the frame.**

5) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
6) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
7) Install the COVER LEFT (PL1.1.6). (RRP1.3)
8) Install the COVER REAR (PL1.1.3). (RRP1.1)
9) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

24PPM

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
5) Remove the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
6) Remove the COVER TOP (PL1.1.7). (RRP1.4)
7) Release the 2 hooks of the COVER FRONT securing it to the printer by pressing down the 2 hooks at the upper portion of it, and open it to forward.
8) Shift the COVER FRONT in the direction of the arrows. Remove the COVER FRONT from the printer by releasing the 2 hooks at the lower portion of it.

Replacement

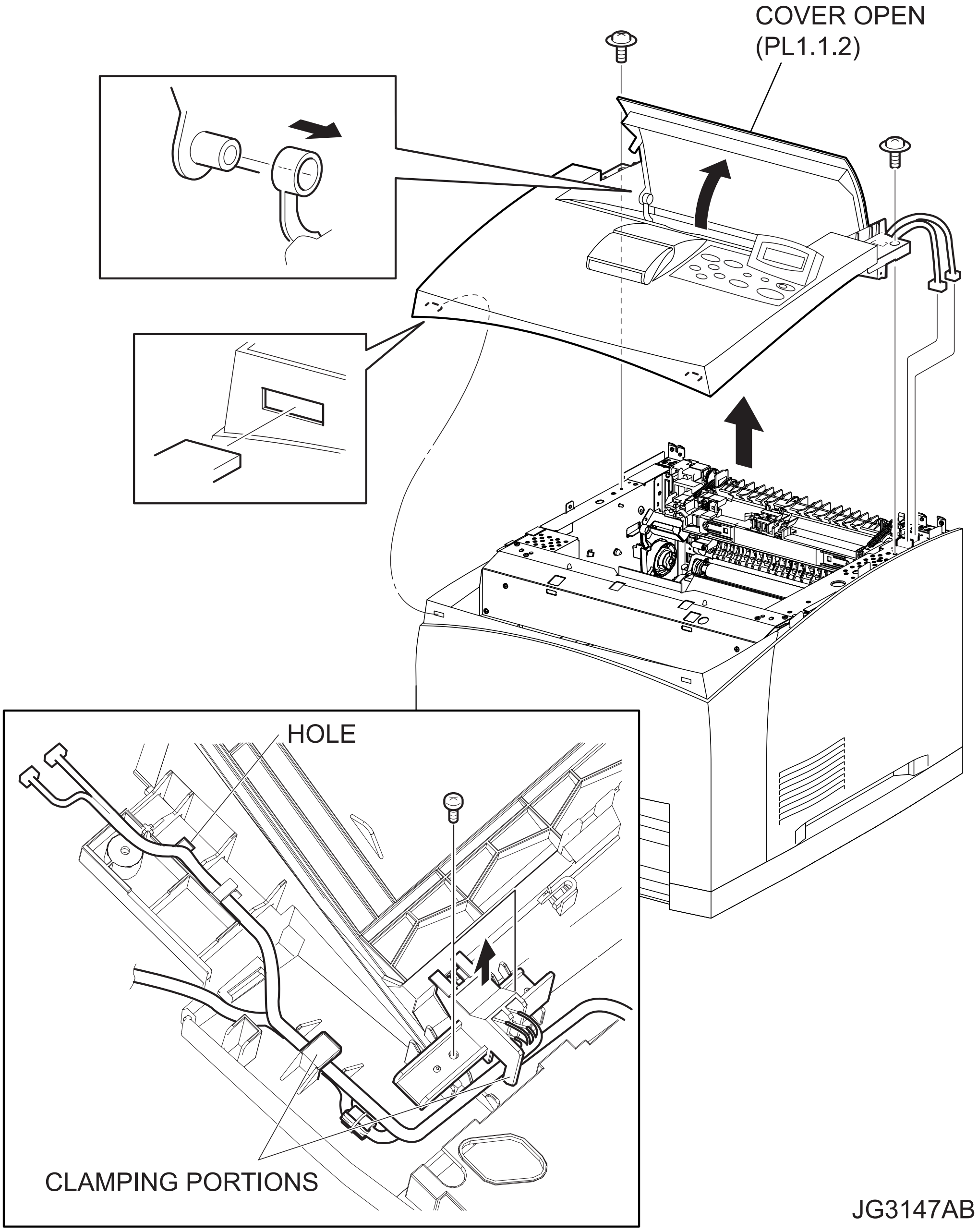
1) Hang the 2 hooks at the lower portion of the COVER FRONT to the printer.
2) Lock the 2 hooks at the upper portion of the COVER FRONT to the printer, and then secure it to the printer.
3) Install the COVER TOP (PL1.1.7). (RRP1.4)
4) Install the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)

NOTE

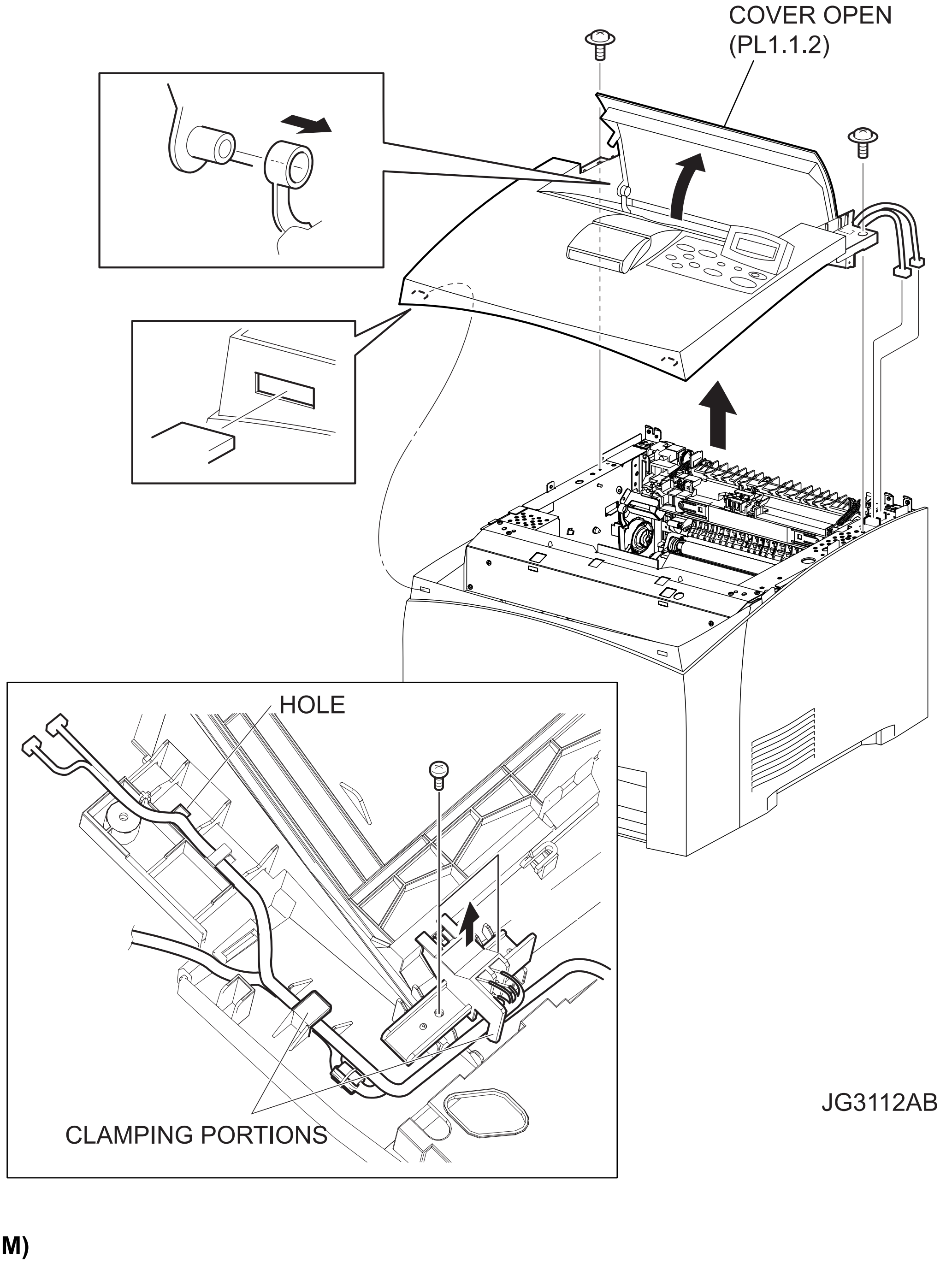
When installing, put the harness of the MOTOR ASSY EXIT into the square hole of the frame.

5) Install the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
6) Install the COVER LEFT (PL1.1.6). (RRP1.3)
7) Install the COVER REAR (PL1.1.3). (RRP1.1)
8) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)

RRP1.6 SWITCH I/L ASSY (PL1.1.11)


COVER OPEN
(PL1.1.2)
HOLE
CLAMPING PORTIONS
JG3147AB

(34PPM)


COVER OPEN
(PL1.1.2)
HOLE
CLAMPING PORTIONS
JG3112AB

(24PPM)

34PPM

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
6) Remove the 500 EXIT ASSY (PL10.1.2). (RRP10.2)
7) Remove the 2 screws (silver with flange, 8mm) securing the COVER TOP to the printer.
8) Remove the LEVER LINK (PL8.1.29) from the boss of the COVER OPEN (PL1.1.2).

NOTE **When removing the LEVER LINK from the boss of the COVER OPEN, the COVER OPEN is opened, and the LEVER LINK is extended.**

NOTE **In the following steps, do not separate the COVER TOP and the printer too far from the printer, since the OPERATION PANEL (PL1.1.1) attached to the COVER TOP is connected to the printer.**

9) Release the 2 hooks securing the front of the COVER TOP to the COVER FRONT (PL1.1.5), and pull out the COVER TOP slightly away from the printer.
10) Disconnect the connectors (P/J144 and P/J411) of the SWITCH I/L ASSY from the frame connectors.
11) Disconnect the connector (P/J1) of the OPERATION PANEL.
12) Release the harness clampers of the SWITCH I/L ASSY and OPERATION PANEL.
13) Remove the COVER TOP.
14) Remove the 2 screws (gold tapping, 8mm) securing the SWITCH I/L ASSY, and remove the SWITCH I/L ASSY.

Replacement

1) Secure the SWITCH I/L ASSY to the COVER TOP using the 2 screws (gold tapping, 8mm).
2) Connect the connector (P/J1) of the OPERATION PANEL.
3) Secure the harnesses with the 2 clampers on the SWITCH I/L ASSY and OPERATION PANEL.
4) Connect the connectors (P/J144 and P/J411) of the SWITCH I/L ASSY to the frame connectors.
5) Install the COVER TOP to the printer, and secure it to the COVER FRONT (PL1.1.5) using the 2 hooks on the front of the COVER TOP.
6) Put the boss of the COVER OPEN (PL1.1.2) into the hole of the LEVER LINK (PL8.1.29).

NOTE **When putting the boss of the COVER OPEN into the hole of the LEVER LINK, the COVER OPEN should be opened, and the LEVER LINK should be extended.**

7) Secure the COVER TOP to the printer using the 2 screws (silver with flange, 8mm).
8) Install the 500 EXIT ASSY (PL10.1.2). (RRP10.2)

NOTE **When installing, put the harnesses of the MOTOR ASSY EXIT and HARNESS ASSY EXIT SNR1 into the square hole of the frame.**

9) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
10) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
11) Install the COVER LEFT (PL1.1.6). (RRP1.3)
12) Install the COVER REAR (PL1.1.3). (RRP1.1)
13) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

24PPM

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
5) Remove the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
6) Remove the 2 screws (silver with flange, 8mm) securing the COVER TOP to the printer.
7) Remove the LEVER LINK (PL8.1.29) from the boss of the COVER OPEN (PL1.1.2).

NOTE **When removing the LEVER LINK from the boss of the COVER OPEN, the COVER OPEN is opened, and the LEVER LINK is extended.**

NOTE **In the following steps, do not separate the COVER TOP and the printer too far from the printer, since the OPERATION PANEL (PL1.1.1) attached to the COVER TOP is connected to the printer.**

8) Release the 2 hooks securing the front of the COVER TOP to the COVER FRONT (PL1.1.5), and pull out the COVER TOP slightly away from the printer.
9) Disconnect the connectors (P/J144 and P/J411) of the SWITCH I/L ASSY from the frame connectors.
10) Disconnect the connector (P/J1) of the OPERATION PANEL.
11) Release the harness clampers of the SWITCH I/L ASSY and OPERATION PANEL.
12) Remove the COVER TOP.
13) Remove the 2 screws (gold tapping, 8mm) securing the SWITCH I/L ASSY, and remove the SWITCH I/L ASSY.

Replacement

1) Secure the SWITCH I/L ASSY to the COVER TOP using the 2 screws (gold tapping, 8mm).
2) Connect the connector (P/J1) of the OPERATION PANEL.
3) Secure the harnesses with the 2 clampers on the SWITCH I/L ASSY and OPERATION PANEL.
4) Connect the connectors (P/J144 and P/J411) of the SWITCH I/L ASSY to the frame connectors.
5) Install the COVER TOP to the printer, and secure it to the COVER FRONT (PL1.1.5) using the 2 hooks on the front of the COVER TOP.
6) Put the boss of the COVER OPEN (PL1.1.2) into the hole of the LEVER LINK (PL8.1.29).

NOTE **When putting the boss of the COVER OPEN into the hole of the LEVER LINK, the COVER OPEN should be opened, and the LEVER LINK should be extended.**

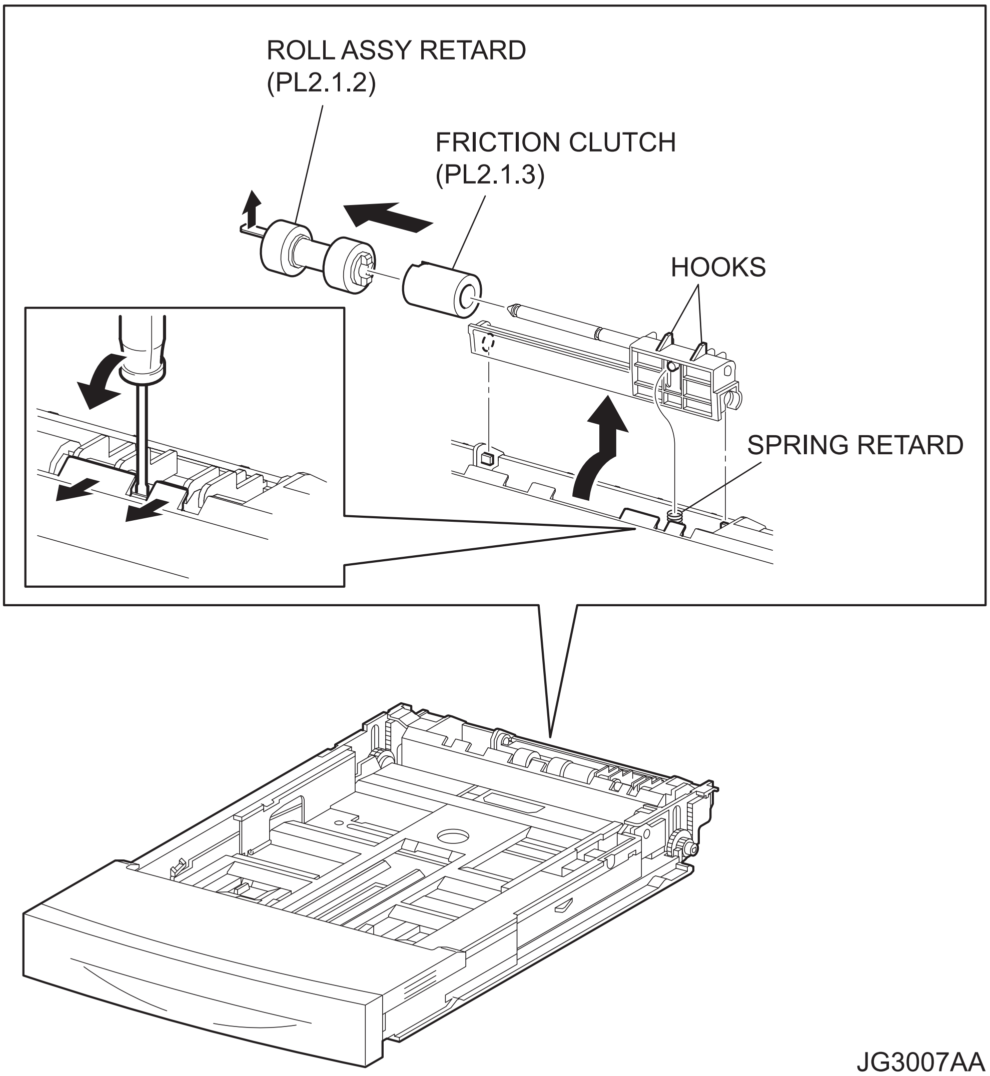
7) Secure the COVER TOP to the printer using the 2 screws (silver with flange, 8mm).
8) Install the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)

NOTE **When installing, put the harness of the MOTOR ASSY EXIT into the square hole of the frame.**

9) Install the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
10) Install the COVER LEFT (PL1.1.6). (RRP1.3)
11) Install the COVER REAR (PL1.1.3). (RRP1.1)
12) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)

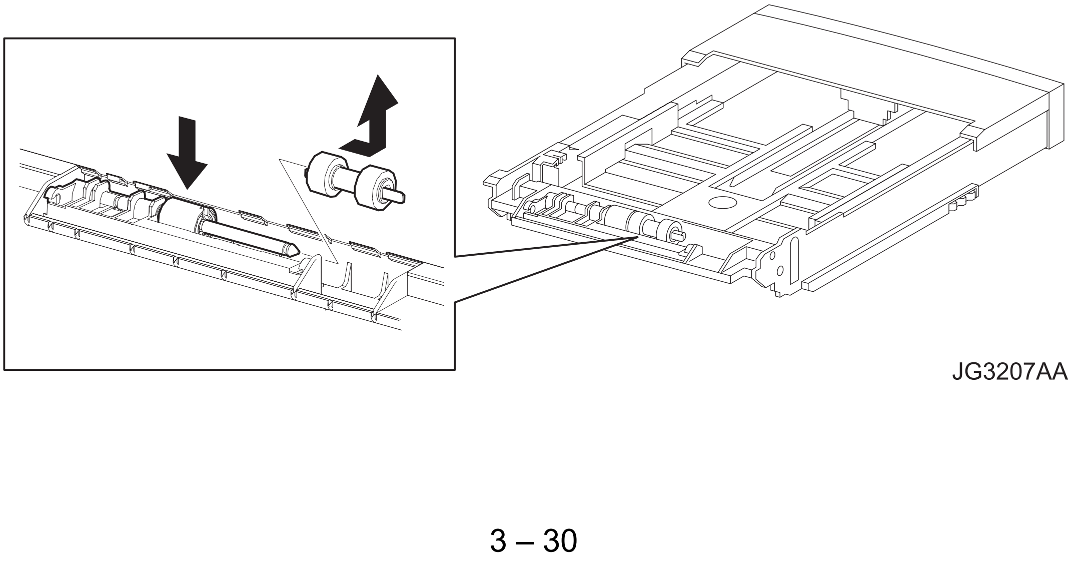
RRP2. 150 Paper Cassette

RRP2.1 ROLL ASSY RETARD (PL2.1.2)


ROLL ASSY RETARD (PL2.1.2)
FRICTION CLUTCH (PL2.1.3)
HOOKS
SPRING RETARD

JG3007AA

NOTE **Other than the procedure above, it is possible to remove the ROLL ASSY RETARD by pushing down the HOLDER RETARD.**



JG3207AA

Removal

1) Pull out the 150 PAPER CASSETTE from the printer.
2) Release the hooks securing the HOLDER RETARD (PL2.1.5) to the 150 PAPER CASSETTE using a screwdriver or the like.
3) Lift up the HOLDER RETARD in the direction of the arrow, and remove it.
4) Release the hook securing the ROLL ASSY RETARD, and pull it out from the SHAFT RETARD (PL2.1.4).

NOTE **When removing, do not hold the rubber rollers of the ROLL ASSY RETARD.**

NOTE **When removing HOLDER RETARD, be careful not to lose SPRING RETARD.**

Replacement

1) Install the ROLL ASSY RETARD to the SHFT RETARD (PL2.1.4), and secure the ROLL ASSY RETARD with the hook.

NOTE **When installing, do not hold the rubber rollers of the ROLL ASSY RETARD.**

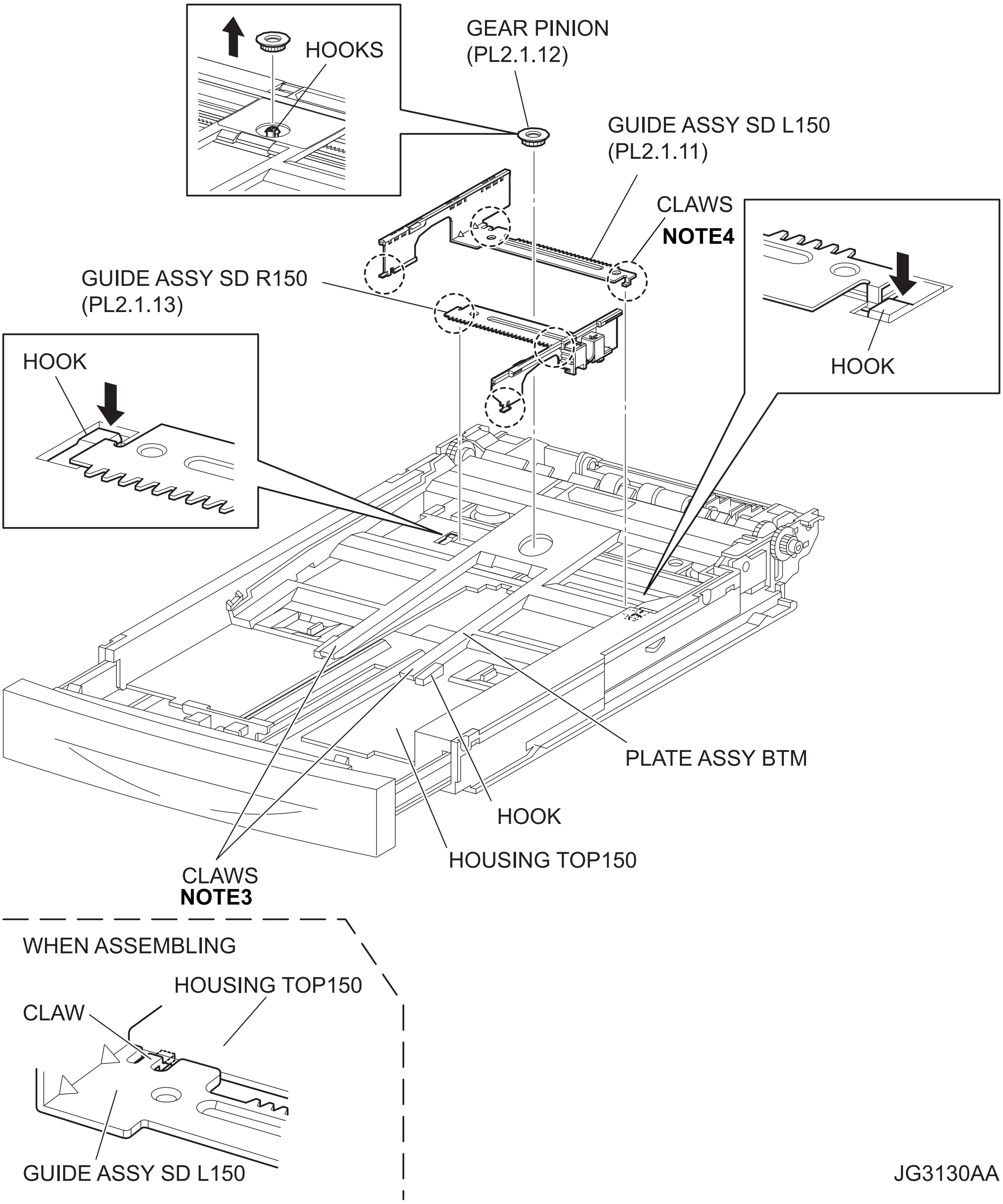
NOTE **Be sure to install the hook of the ROLL ASSY RETARD in the groove of the SHAFT RETARD.**

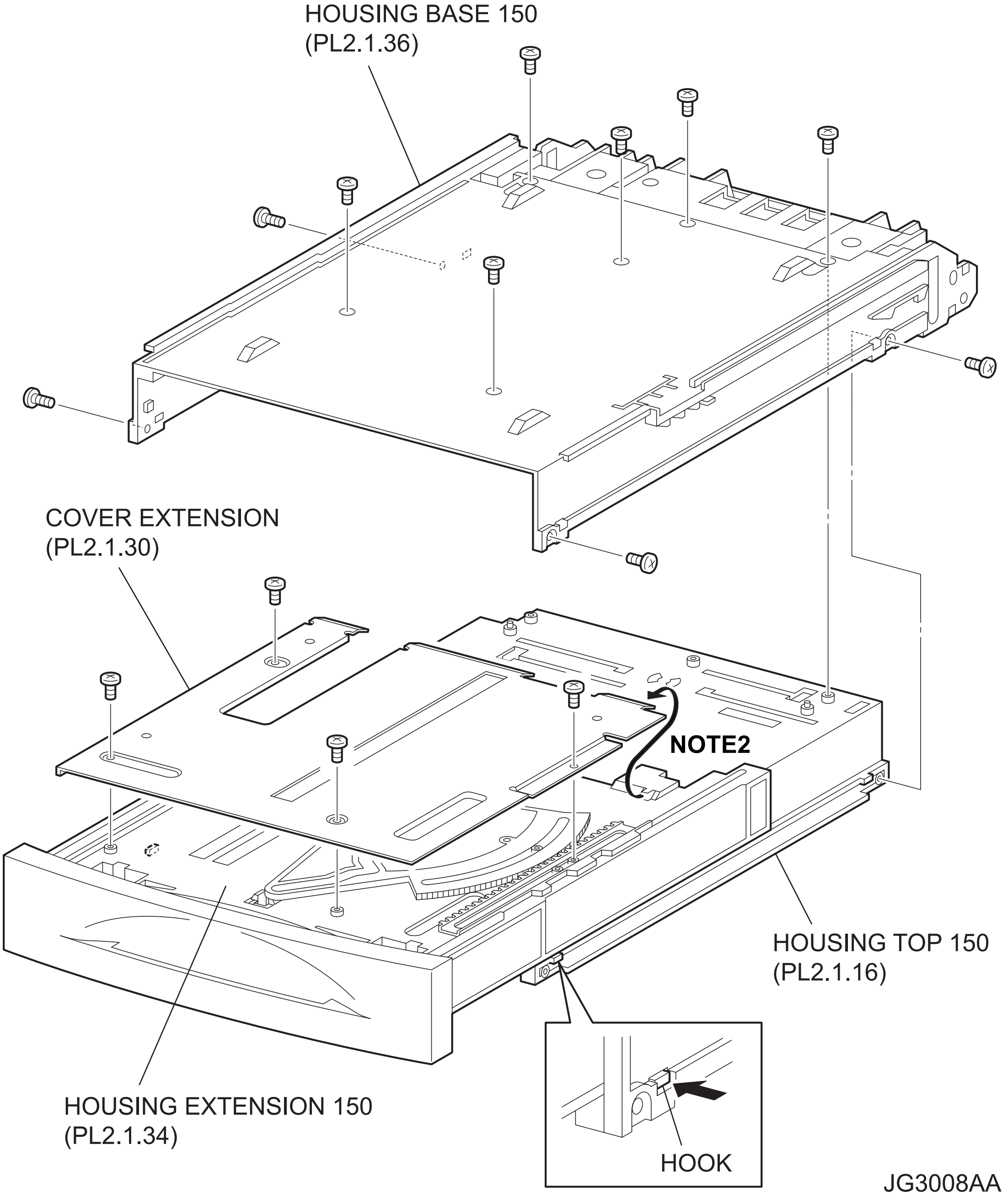
2) Move the HOLDER RETARD (PL2.1.5) in the opposite direction of the arrow, and install it to the 150 PAPER CASSETTE.

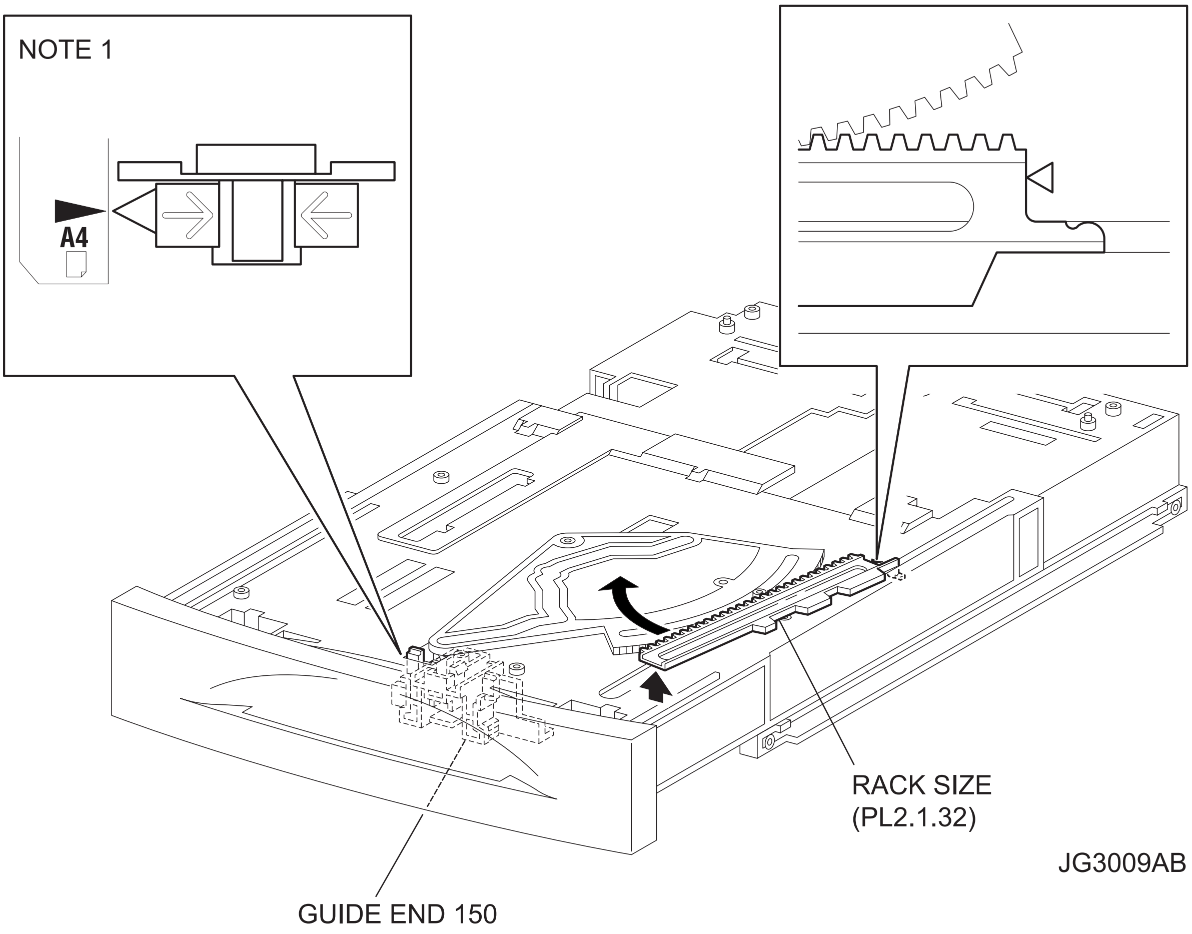
NOTE **After installing, make sure the HOLDER RETARD comes back to the former position with the spring force of the SPRING RETARD (PL2.1.6), when pushing down the HOLDER RETARD and then release the finger from it.**

3) Install the 150 PAPER CASSETTE to the printer.

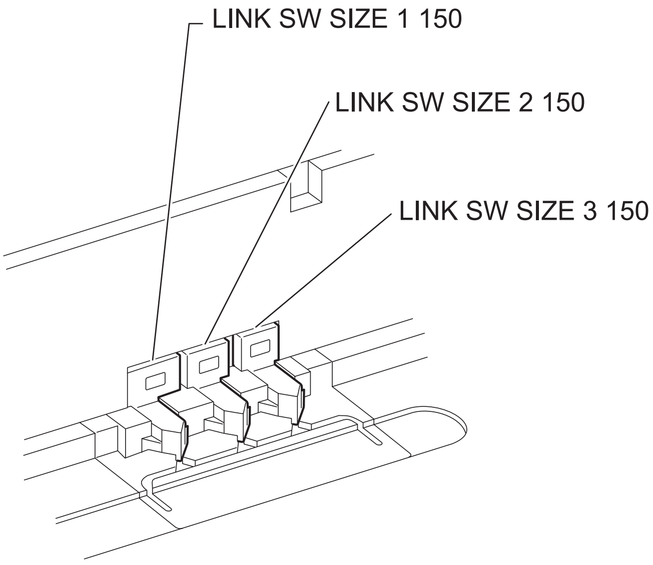
RRP2.2 RACK SIZE (PL2.1.32)


HOOKS
GEAR PINION
(PL2.1.12)
GUIDE ASSY SD L150
(PL2.1.11)
CLAWS
NOTE4
GUIDE ASSY SD R150
(PL2.1.13)
HOOK
HOOK
PLATE ASSY BTM
HOOK
HOUSING TOP150
CLAWS
NOTE3
WHEN ASSEMBLING
HOUSING TOP150
CLAW
GUIDE ASSY SD L150
JG3130AA


HOUSING BASE 150
(PL2.1.36)
COVER EXTENSION
(PL2.1.30)
NOTE2
HOUSING TOP 150
(PL2.1.16)
HOUSING EXTENSION 150
(PL2.1.34)
HOOK
JG3008AA


NOTE 1
A4
RACK SIZE
(PL2.1.32)
GUIDE END 150

JG3009AB


LINK SW SIZE 1 150
LINK SW SIZE 2 150
LINK SW SIZE 3 150

JG3200AB

Removal

1) Remove the COVER CST (PL2.1.1) from the 150 PAPER CASSETTE.
2) Release the lock of the LOCK EXTENSION, and draw out the cassette extension as far as it will go.
3) Release the hooks securing the GEAR PINION (PL2.1.12) to the HOUSING TOP 150 (PL2.1.16), and remove the GEAR PINION.
4) While pressing down the lock of the STOPPER GEAR (PL2.1.28), release the lock of the LEVER BTM LOCK (PL2.1.26) to lift up the PLATE ASSY BTM (PL2.1.10).
5) Slide the GUIDE ASSY SD L150 (PL2.1.11) inward, and remove it from the HOUSING TOP 150 by pressing down the hook of the HOUSING TOP 150.
6) Slide the GUIDE ASSY SD R150 (PL2.1.13) inward, and remove it from the HOUSING TOP 150 by pressing down the hook of the HOUSING TOP 150.
7) Remove the 2 screws (gold tapping, 8mm) from both right and left side, as well as the 6 screws (gold tapping, 8mm) on the back, that secure the HOUSING TOP 150 (PL2.1.16) to the HOUSING BASE 150 (PL2.1.36).
8) Release the 4 hooks of the HOUSING TOP 150, and remove the HOUSING TOP 150 and HOUSING EXTENSION 150 (PL2.1.34) from the HOUSING BASE 150.
9) Remove the 4 screws (gold tapping, 6mm) securing the COVER EXTENSION (PL2.1.30) to the HOUSING EXTENSION 150.
10) Remove the COVER EXTENSION from the HOUSING EXTENSION 150.
11) Lift the front of the RACK SIZE (PL2.1.32) a little, and turn it in the direction of the arrow to remove it from the HOUSING EXTENSION 150.

Replacement

1) Put the hook of the tip of the RACK SIZE (PL2.1.32) into the groove of the HOUSING EXTENSION 150, and turn it in the opposite direction of the arrow.
2) Align the end of the RACK SIZE with the triangle mark printed on the HOUSING EXTENSION 150 as shown in the figure, and install the RACK SIZE to the HOUSING EXTENSION 150.

NOTE **When installing the RACK SIZE, be sure to draw out the GUIDE ASSY END 150 (PL2.1.35) as far as it will go.(NOTE1).**

3) Install the COVER EXTENSION (PL2.1.30) to the HOUSING EXTENSION 150 using the 4 screws (gold tapping, 6mm).

NOTE **When installing, make sure the COVER EXTENSION is inserted under 3 claws of the HOUSING EXTENSION 150.(NOTE2).**

NOTE **Use 6mm size of fixed screw. If 8mm size of screw is used, HOUSING EXTENSION 150 doesn't operate smoothly and LOCK EXTENSION 150 doesn't operate correctly.**

4) Install the HOUSING EXTENSION 150 and HOUSING TOP 150 (PL2.1.16) to the HOUSING BASE 150 (PL2.1.36) while pushing the LINK SW SIZE1-150 (PL2.1.37), LINK SW SIZE2-150 (PL2.1.38) and LINK SW SIZE3-150 (PL2.1.39) of the HOUSING BASE 150 outward as shown in the figure.

NOTE **Be sure to put 2 claws that on the top of the PLATE ASSY BTM under the hooks on the HOUSING TOP 150.(NOTE3).**

5) After assembling the HOUSING TOP 150 to HOUSING BASE 150 using the 4 hooks, secure them using the 2 screws (gold tapping, 8mm) on both right and left sides, as well as the 6 screws (gold tapping, 8mm) on the back.

NOTE **After tightening the screws, move the GUIDE ASSY END 150 back and forth, and make sure that the LINK SW SIZEs operate smoothly.**

6) While pressing down the hook of the HOUSING TOP 150, install the GUIDE ASSY SD R150 (PL2.1.13) to the HOUSING TOP 150.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD R150 sit correctly in the grooves of the HOUSING TOP 150.(NOTE4).**

7) While pressing down the hook of the HOUSING TOP 150, install the GUIDE ASSY SD L150 (PL2.1.11) to the HOUSING TOP 150.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD L150 sit correctly in the grooves of the HOUSING TOP 150.(NOTE4)**

8) Push the PLATE ASSY BTM downward to lock.
9) With completely opened GUIDE ASSY SD L150 (PL2.1.11) and GUIDE ASSY SD R150 (PL2.1.13) to the both sides, install the GEAR PINION (PL2.1.12) to the HOUSING TOP 150.

NOTE **When installing the GEAR PINION, make sure the GUIDE ASSY SD R150 and GUIDE ASSY SD L150 are completely opened. If not, the side register may be misaligned.**

10) Install the COVER CST (PL2.1.1) to the 150 PAPER CASSETTE.

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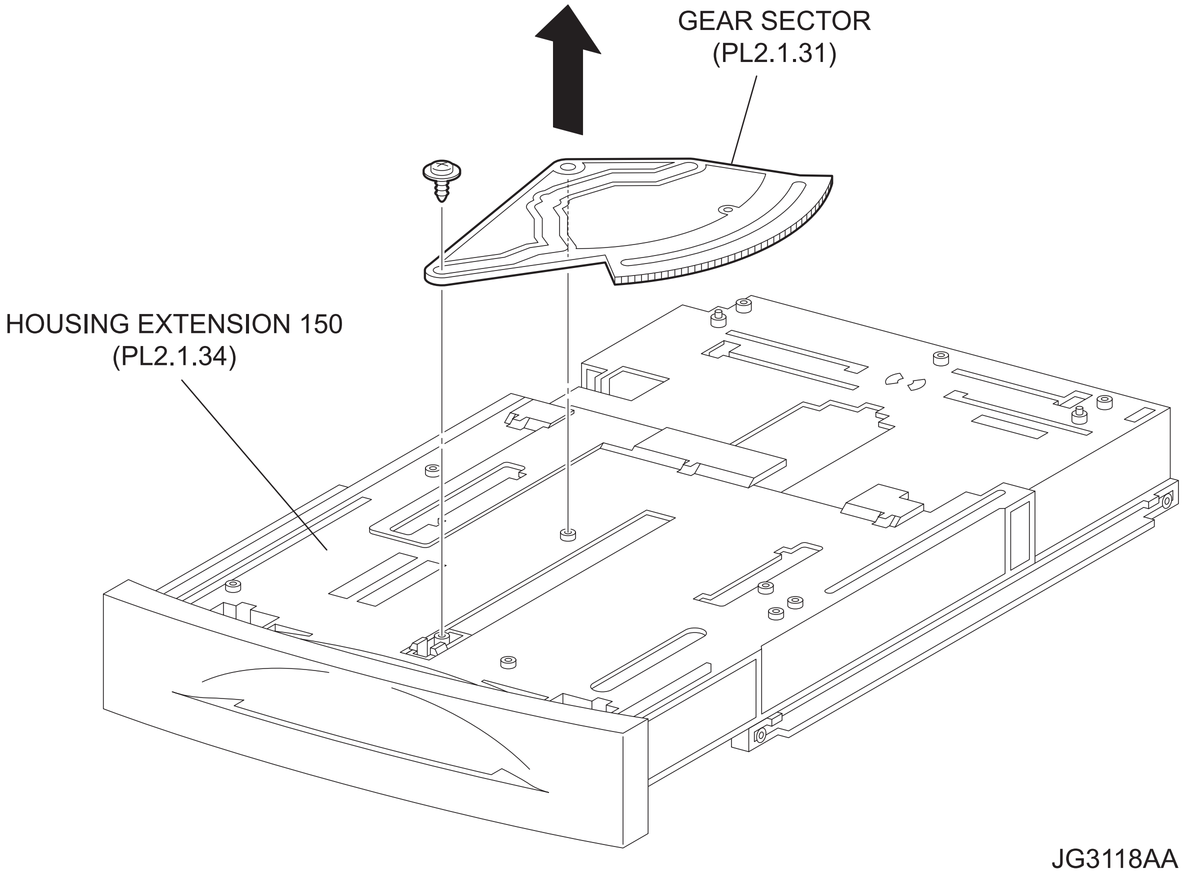
RRP2.3 GEAR SECTOR (PL2.1.31)


GEAR SECTOR
(PL2.1.31)
HOUSING EXTENSION 150
(PL2.1.34)
JG3118AA

Removal

1) Remove the COVER CST (PL2.1.1) from the 150 PAPER CASSETTE.
2) Release the lock of the LOCK EXTENSION, and draw out the cassette extension as far as it will go.
3) Release the hooks securing the GEAR PINION (PL2.1.12) to the HOUSING TOP 150 (PL2.1.16), and remove the GEAR PINION.
4) While pressing down the lock of the STOPPER GEAR (PL2.1.28), release the lock of the LEVER BTM LOCK (PL2.1.26) to lift up the PLATE ASSY BTM (PL2.1.10).
5) Slide the GUIDE ASSY SD L150 (PL2.1.11) inward, and remove it from the HOUSING TOP 150 by pressing down the hook of the HOUSING TOP 150.
6) Slide the GUIDE ASSY SD R150 (PL2.1.13) inward, and remove it from the HOUSING TOP 150 by pressing down the hook of the HOUSING TOP 150.
7) Remove the 2 screws (gold tapping, 8mm) from both right and left sides, as well as the 6 screws (gold tapping, 8mm) on the back, that secure the HOUSING TOP 150 (PL2.1.16) to the HOUSING BASE 150 (PL2.1.36).
8) Release the 4 hooks of the HOUSING TOP 150, and remove the HOUSING TOP 150 and HOUSING EXTENSION 150 (PL2.1.34) from the HOUSING BASE 150.
9) Remove the 4 screws (gold tapping, 6mm) securing the COVER EXTENSION (PL2.1.30) to the HOUSING EXTENSION 150.
10) Remove the COVER EXTENSION from the HOUSING EXTENSION 150.
11) Remove the RACK SIZE (PL2.1.32). (RRP2.2)
12) Remove the screw (black with flange, 8mm) securing the GEAR SECTOR.
13) Remove the GEAR SECTOR from the HOUSING EXTENSION 150.

Replacement

1) Install the GEAR SECTOR to the HOUSING EXTENSION 150 (PL2.1.34).
2) Secure the GEAR SECTOR using the screw (black with flange, 8mm).
3) Install the RACK SIZE 150 (PL2.1.32). (RRP2.2)
4) Install the COVER EXTENSION (PL2.1.30) to the HOUSING EXTENSION 150 using the 4 screws (gold tapping, 6mm).

NOTE **When installing, make sure the COVER EXTENSION is inserted under 3 claws of the HOUSING EXTENSION 150.**

NOTE **Use 6mm size of fixed screw. If 8mm size of screw is used, HOUSING EXTENSION 150 doesn't operate smoothly and LOCK EXTENSION 150 doesn't operate correctly.**

5) Install the HOUSING EXTENSION 150 and HOUSING TOP 150 (PL2.1.16) to the HOUSING BASE 150 (PL2.1.36) while pushing the LINK SW SIZE1-150 (PL2.1.37), LINK SW SIZE2-150 (PL2.1.38) and LINK SW SIZE3-150 (PL2.1.39) of the HOUSING BASE 150 outward as shown in the figure.(Figure 2.2)

NOTE **Be sure to put 2 claws that on the top of the PLATE ASSY BTM under the hooks on the HOUSING TOP 150.**

6) After assembling the HOUSING TOP 150 to HOUSING BASE 150 using the 4 hooks, secure them using the 2 screws (gold tapping, 8mm) on both right and left sides, as well as the 6 screws (gold tapping, 8mm) on the back.

NOTE **After tightening the screws, move the GUIDE ASSY END 150 back and forth, and make sure that the LINK SW SIZEs operate smoothly.**

7) While pressing down the hook of the HOUSING TOP 150, install the GUIDE ASSY SD R150 (PL2.1.13) to the HOUSING TOP 150.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD R150 sit correctly in the grooves of the HOUSING TOP 150.**

8) While pressing down the hook of the HOUSING TOP 150, install the GUIDE ASSY SD L150 (PL2.1.11) to the HOUSING TOP 150.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD L150 sit correctly in the grooves of the HOUSING TOP 150.**

9) Push the PLATE ASSY BTM downward to lock.
10) With completely opened GUIDE ASSY SD L150 (PL2.1.11) and GUIDE ASSY SD R150 (PL2.1.13) to the both sides, install the GEAR PINION (PL2.1.12) to the HOUSING TOP 150.

NOTE **When installing the GEAR PINION, make sure the GUIDE ASSY SD R150 and GUIDE ASSY SD L150 are completely opened. If not, the side register may be misaligned.**

11) Install the COVER CST (PL2.1.1) to the 150 PAPER CASSETTE.

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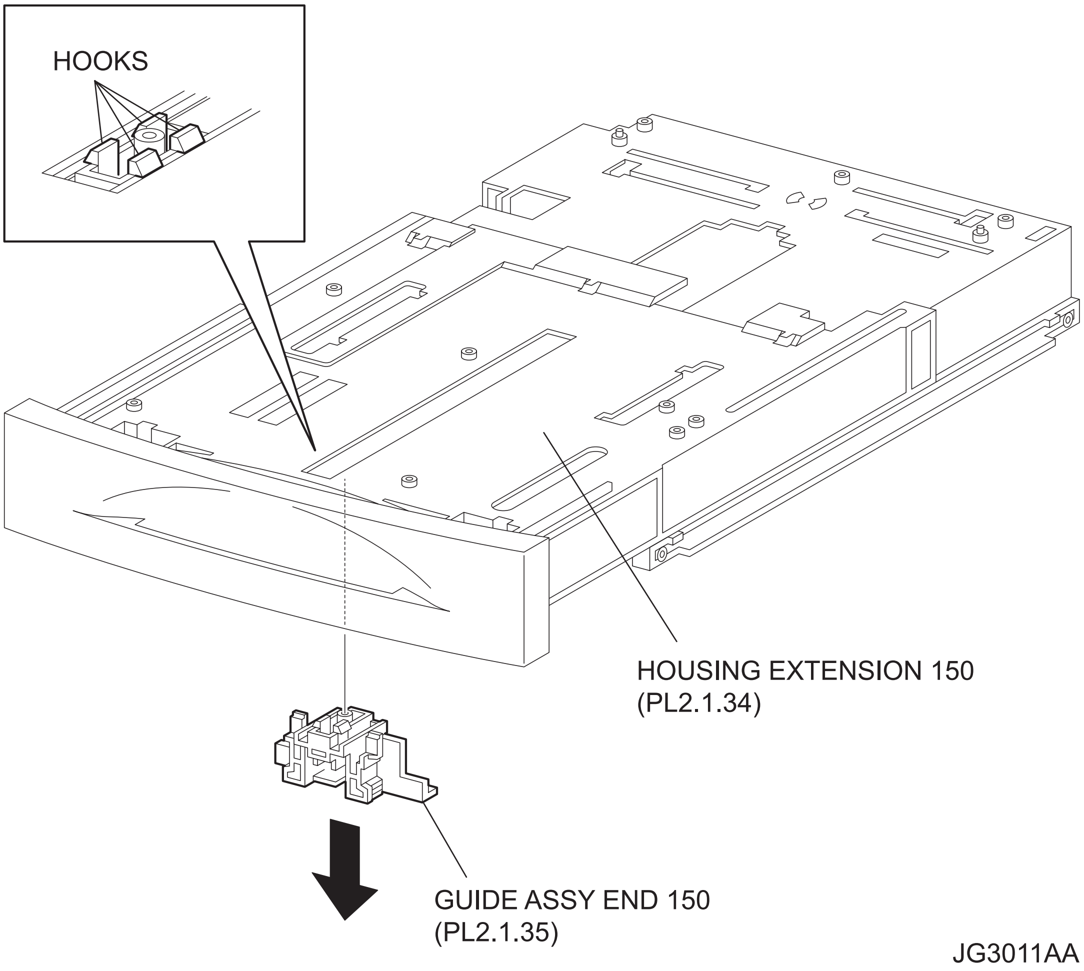
RRP2.4 GUIDE ASSY END 150 (PL2.1.35)


HOOKS
HOUSING EXTENSION 150
(PL2.1.34)
GUIDE ASSY END 150
(PL2.1.35)
JG3011AA

Removal

1) Remove the COVER CST (PL2.1.1) from the 150 PAPER CASSETTE.
2) Release the lock of the LOCK EXTENSION, and draw out the cassette extension as far as it will go.
3) Release the hooks securing the GEAR PINION (PL2.1.12) to the HOUSING TOP 150 (PL2.1.16), and remove the GEAR PINION.
4) While pressing down the lock of the STOPPER GEAR (PL2.1.28), release the lock of the LEVER BTM LOCK (PL2.1.26) to lift up the PLATE ASSY BTM (PL2.1.10). (Figure 3.5)
5) Slide the GUIDE ASSY SD L150 (PL2.1.11) inward, and remove it from the HOUSING TOP 150 by pressing down the hook of the HOUSING TOP 150.
6) Slide the GUIDE ASSY SD R150 (PL2.1.13) inward, and remove it from the HOUSING TOP 150 by pressing down the hook of the HOUSING TOP 150.
7) Remove the 2 screws (gold tapping, 8mm) from both right and left sides, as well as the 6 screws (gold tapping, 8mm) on the back, that secure the HOUSING TOP 150 (PL2.1.16) to the HOUSING BASE 150 (PL2.1.36).
8) Release the 4 hooks of the HOUSING TOP 150, and remove the HOUSING TOP 150 and HOUSING EXTENSION 150 (PL2.1.34) from the HOUSING BASE 150.
9) Remove the 4 screws (gold tapping, 6mm) securing the COVER EXTENSION (PL2.1.30) to the HOUSING EXTENSION 150.
10) Remove the COVER EXTENSION from the HOUSING EXTENSION 150.
11) Remove the RACK SIZE (PL2.1.32). (RRP2.2)
12) Remove the GEAR SECTOR (PL2.1.31). (RRP2.3)
13) Release the hooks securing the GUIDE ASSY END 150 to the HOUSING EXTENSION 150.

NOTE

Be careful handling the hooks of the GUIDE ASSY END150. They are fragile and could break if given excessive force.

14) Remove the GUIDE ASSY END 150 from the HOUSING EXTENSION 150.

Replacement

1) Secure the GUIDE ASSY END 150 to the HOUSING EXTENSION 150 (PL2.1.34) using the 4 hooks.
2) Install the GEAR SECTOR (PL2.1.31). (RRP2.3)
3) Install the RACK SIZE (PL2.1.32). (RRP2.2)
4) Install the COVER EXTENSION (PL2.1.30) to the HOUSING EXTENSION 150 using the 4 screws (gold tapping, 6mm).

NOTE

When installing, make sure the COVER EXTENSION is inserted under 3 claws of the HOUSING EXTENSION 150.

NOTE

Use 6mm size of fixed screw. If 8mm size of screw is used, HOUSING EXTENSION 150 doesn't operate smoothly and LOCK EXTENSION 150 doesn't operate correctly.

5) Install the HOUSING EXTENSION 150 and HOUSING TOP 150 (PL2.1.16) to the HOUSING BASE 150 (PL2.1.36) while pushing the LINK SW SIZE1-150 (PL2.1.37), LINK SW SIZE2-150 (PL2.1.38) and LINK SW SIZE3-150 (PL2.1.39) of the HOUSING BASE 150 outward as shown in the figure. (Figure 2.2)

NOTE

Be sure to put 2 claws that on the top of the PLATE ASSY BTM under the hooks on the HOUSING TOP 150.

6) After assembling the HOUSING TOP 150 to the HOUSING BASE 150 using the 4 hooks, secure them using the 2 screws (gold tapping, 8mm) on both right and left sides, as well as the 6 screws (gold tapping, 8mm) on the back.

NOTE **After tightening the screws, move the GUIDE ASSY END 150 back and forth, and make sure that the LINK SW SIZEs operate smoothly.**

7) While pressing down the hook of the HOUSING TOP 150, install the GUIDE ASSY SD R150 (PL2.1.13) to the HOUSING TOP 150.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD R150 sit correctly in the grooves of the HOUSING TOP 150.**

8) While pressing down the hook of the HOUSING TOP 150, install the GUIDE ASSY SD L150 (PL2.1.11) to the HOUSING TOP 150.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD L150 sit correctly in the grooves of the HOUSING TOP 150.**

9) Push the PLATE ASSY BTM downward to lock.

10) With completely opened GUIDE ASSY SD L150 (PL2.1.11) and GUIDE ASSY SD R150 (PL2.1.13) to the both sides, install the GEAR PINION (PL2.1.12) to the HOUSING TOP 150.

NOTE **When installing the GEAR PINION, make sure the GUIDE ASSY SD R150 and GUIDE ASSY SD L150 are completely opened. If not, the side register may be misaligned.**

11) Install the COVER CST (PL2.1.1) to the 150 PAPER CASSETTE.

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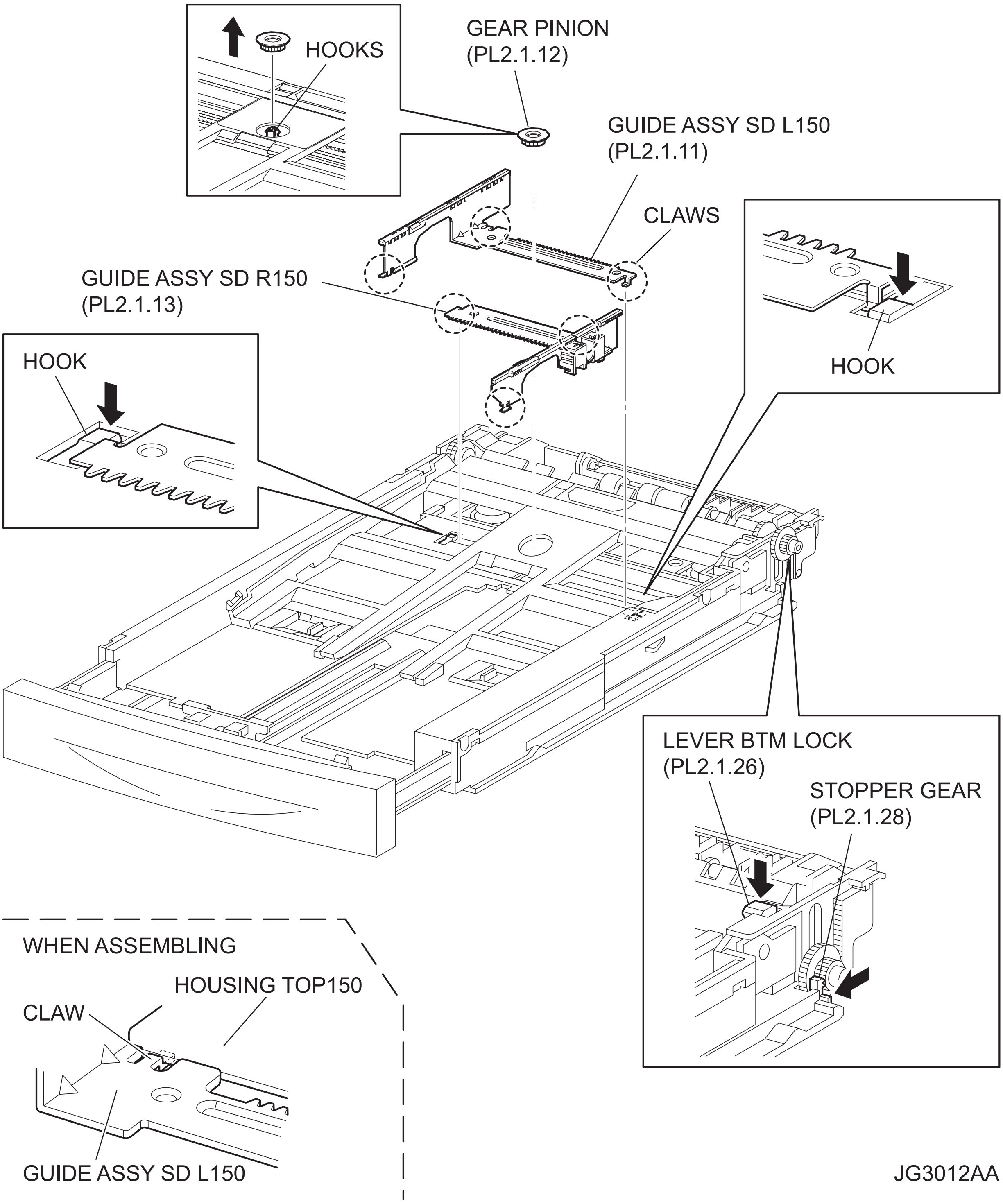
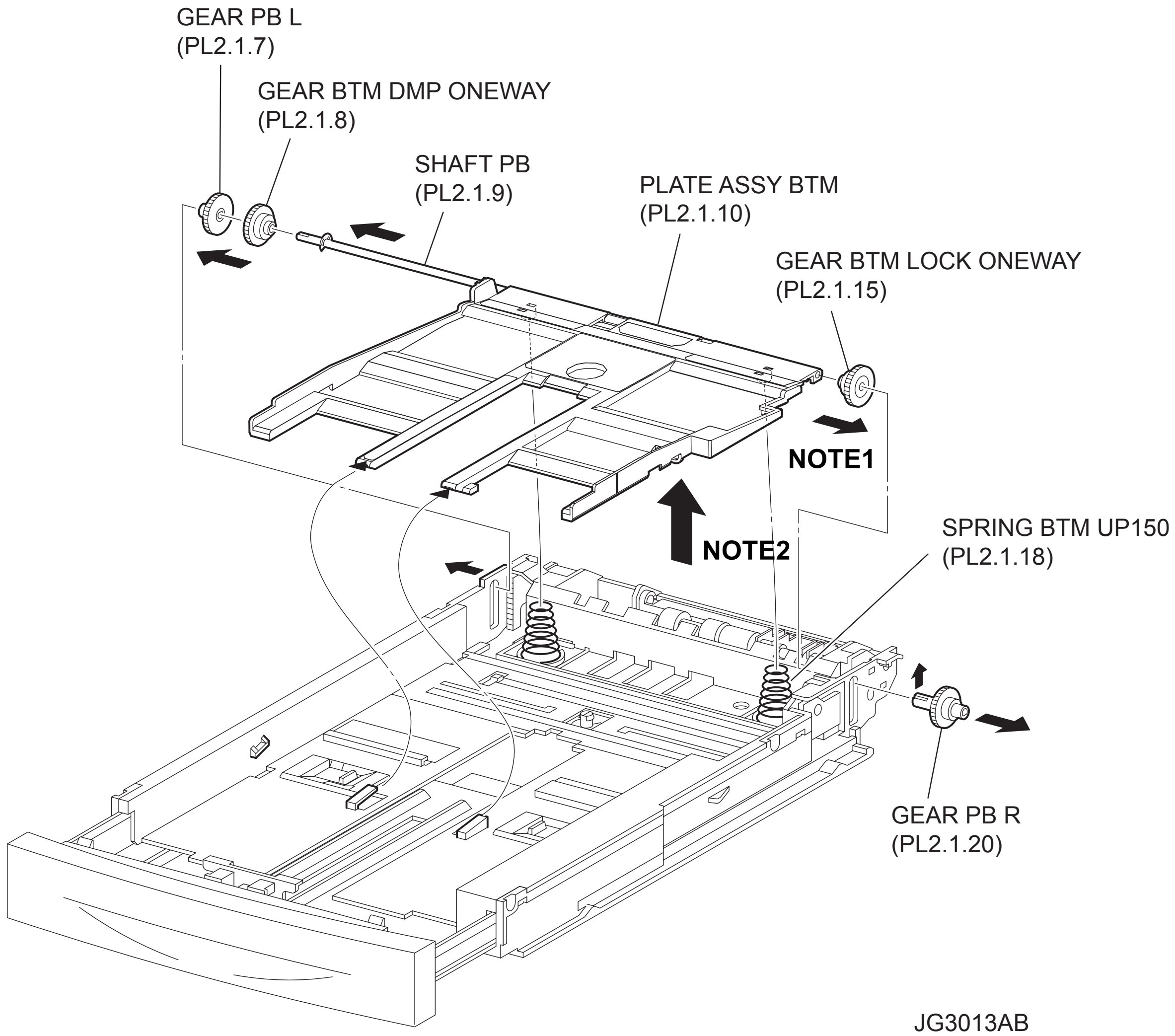
RRP2.5 PLATE ASSY BTM (PL2.1.10)


HOOKS
GEAR PINION
(PL2.1.12)
GUIDE ASSY SD L150
(PL2.1.11)
CLAWS
GUIDE ASSY SD R150
(PL2.1.13)
HOOK
HOOK
LEVER BTM LOCK
(PL2.1.26)
STOPPER GEAR
(PL2.1.28)
WHEN ASSEMBLING
HOUSING TOP150
CLAW
GUIDE ASSY SD L150
JG3012AA


GEAR PB L
(PL2.1.7)
GEAR BTM DMP ONEWAY
(PL2.1.8)
SHAFT PB
(PL2.1.9)
PLATE ASSY BTM
(PL2.1.10)
GEAR BTM LOCK ONEWAY
(PL2.1.15)
NOTE1
NOTE2
SPRING BTM UP150
(PL2.1.18)
GEAR PB R
(PL2.1.20)

JG3013AB

Removal

1) Remove the COVER CST (PL2.1.1) from the 150 PAPER CASSETTE.
2) Release the lock of the LOCK EXTENSION, and draw out the cassette extension as far as it will go.
3) Release the hooks securing the GEAR PINION (PL2.1.12) to the HOUSING TOP 150 (PL2.1.16), and remove the GEAR PINION.
4) While pressing down the lock of the STOPPER GEAR (PL2.1.28), release the lock of the LEVER BTM LOCK (PL2.1.26) to lift up the PLATE ASSY BTM (PL2.1.10).
5) Slide the GUIDE ASSY SD L150 (PL2.1.11) inward, and remove it from the HOUSING TOP 150 by pressing down the hook of the HOUSING TOP 150.
6) Slide the GUIDE ASSY SD R150 (PL2.1.13) inward, and remove it from the HOUSING TOP 150 by pressing down the hook of the HOUSING TOP 150.

NOTE **In the following steps, the GEAR PB L (PL2.1.7), GEAR BTM DMP ONEWAY (PL2.1.8) and GEAR BTM LOCK ONEWAY (PL2.1.15) will be detached. Be careful not to lose these gears.**

7) Release the hook of the GEAR PB R (PL2.1.20), and remove it from the SHAFT PB (PL2.1.9).

NOTE **It is hard to remove GEAR PB R. When removing it, be careful not to break it.**

8) Disengage the GEAR PB L from the PLATE GEAR LOCK 150 while bending the HOUSING BASE 150 in the direction of the arrows. Remove the PLATE ASSY BTM together with the SHAFT PB, GEAR PB L, GEAR BTM DMP ONEWAY, and GEAR BTM LOCK ONEWAY from the HOUSING TOP 150.
9) Pull out the SHAFT PB from the PLATE ASSY BTM, and remove the GEAR PB L, GEAR BTM DMP ONEWAY and GEAR BTM LOCK ONEWAY.

Replacement

1) Insert the SHAFT PB (PL2.1.9) into the PLATE ASSY BTM, and insert the GEAR BTM DMP ONE-WAY (PL2.1.8), GEAR PB L (PL2.1.7),and GEAR BTM LOCK ONEWAY (PL2.1.15) to the SHAFT PB.
2) While disengaging the GEAR PB L, install the assembled PLATE ASSY BTM to the HOUSING TOP 150 (PL2.1.16).

NOTE **When installing the PLATE ASSY BTM, be sure to put 2 SPRING BTM UP 150s (PL2.1.18) into the bosses on the back of the PLATE ASSY BTM.(NOTE1).**

NOTE **Be sure to put 2 claws that on the top of the PLATE ASSY BTM under the hooks on the HOUSING TOP 150.(NOTE2).**

3) Install the GEAR PB R (PL2.1.20) to the SHAFT PB, and secure it with the hook.

NOTE **Be sure to install the hook of the GEAR PB R into the groove of the SHAFT PB.**

NOTE **When installing the GEAR PB R, be sure to lift up the PLATE ASSY BTM. If the PLATE ASSY BTM is inclined, a paper skew or jam may occur. Check after the installation is completed.**

4) While pressing down the hook of the HOUSING TOP 150, install the GUIDE ASSY SD R150 (PL2.1.13) to the HOUSING TOP 150.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD R150 sit correctly in the grooves of the HOUSING TOP 150.(NOTE3).**

5) While pressing down the hook of the HOUSING TOP 150, install the GUIDE ASSY SD L150 (PL2.1.11) to the HOUSING TOP 150.

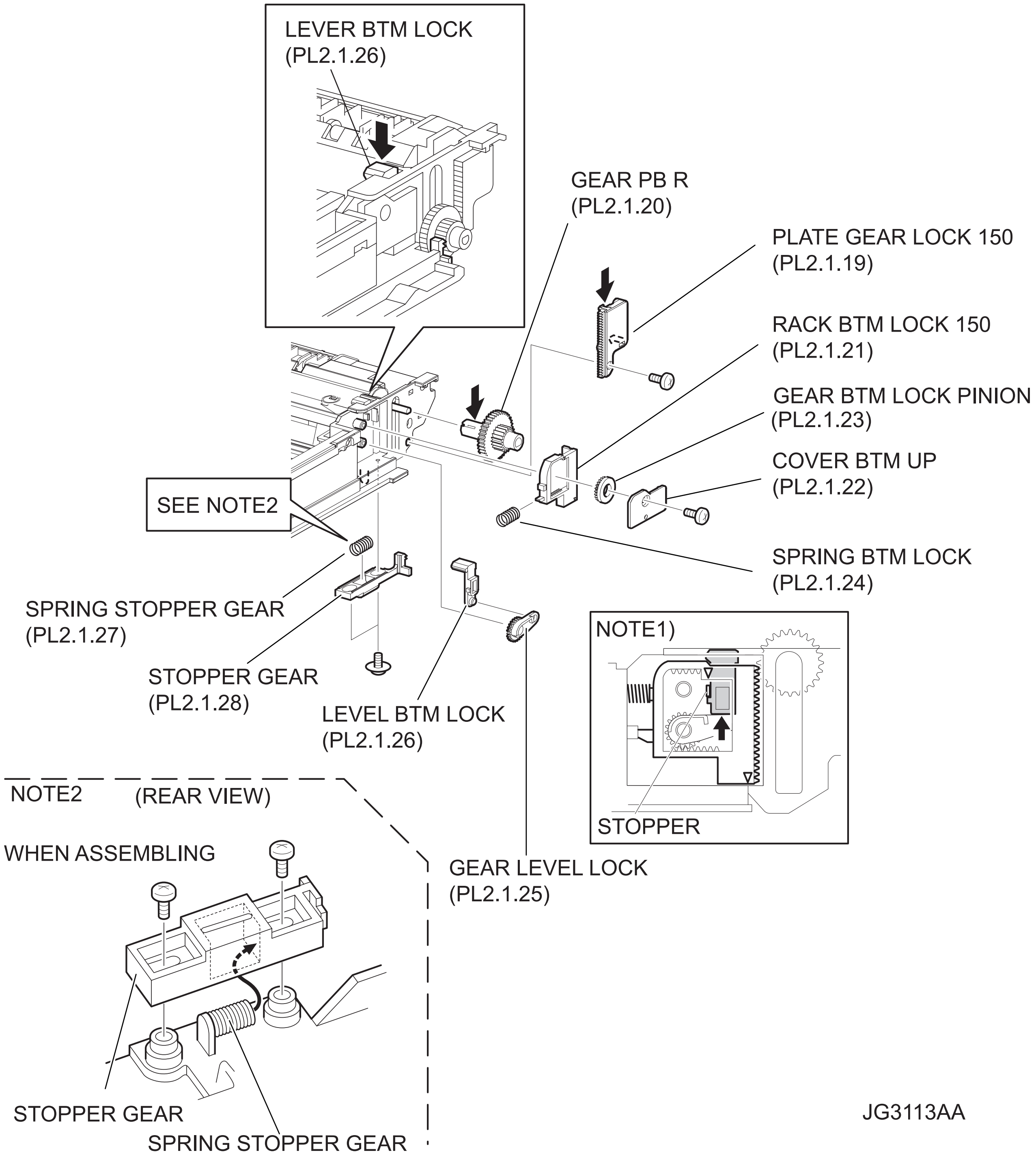
NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD L150 sit correctly in the grooves of the HOUSING TOP 150.**

6) Push the PLATE ASSY BTM downward to lock.
7) Install the GEAR PINION (PL2.1.12) to the HOUSING TOP 150.

NOTE **When installing the GEAR PINION, make sure the GUIDE ASSY SD R150 and GUIDE ASSY SD L150 are completely opened. If not, the side register may be misaligned.**

8) Install the COVER CST (PL2.1.1) to the 150 PAPER CASSETTE.

RRP2.6 GEAR LEVER LOCK (PL2.1.25), LEVER BTM LOCK (PL2.1.26)


LEVER BTM LOCK
(PL2.1.26)
GEAR PB R
(PL2.1.20)
PLATE GEAR LOCK 150
(PL2.1.19)
RACK BTM LOCK 150
(PL2.1.21)
GEAR BTM LOCK PINION
(PL2.1.23)
COVER BTM UP
(PL2.1.22)
SEE NOTE2
SPRING BTM LOCK
(PL2.1.24)
SPRING STOPPER GEAR
(PL2.1.27)
NOTE1)
STOPPER GEAR
(PL2.1.28)
LEVEL BTM LOCK
(PL2.1.26)
STOPPER
NOTE2
(REAR VIEW)
WHEN ASSEMBLING
GEAR LEVEL LOCK
(PL2.1.25)
STOPPER GEAR
SPRING STOPPER GEAR
JG3113AA

Removal

1) Remove the COVER CST (PL2.1.1) from the 150 PAPER CASSETTE.
2) Release the lock of the LOCK EXTENSION, and draw out the cassette extension as far as it will go.
3) While pressing down the lock of the STOPPER GEAR (PL2.1.28), release the lock of LEVER BTM LOCK (PL2.1.26) to lift up the PLATE ASSY BTM (PL2.1.10).
4) Remove the screw (gold tapping, 8mm) securing the PLATE GEAR LOCK 150 (PL2.1.19) at the GEAR PB R (PL2.1.20) side.
5) Release the hook of the PLATE GEAR LOCK 150, and remove it from the HOUSING BASE 150 (PL2.1.36).
6) Release the hook of the GEAR PB R, and remove it from the SHAFT PB (PL2.1.9).
7) Remove the screw (gold tapping, 6mm) securing the COVER BTM UP 150 (PL2.1.22), and remove it from the HOUSING BASE 150.
8) Remove the GEAR BTM LOCK PINION (PL2.1.23) from the HOUSING BASE 150.
9) Remove the RACK BTM LOCK 150 (PL2.1.21) together with the SPRING BTM LOCK (PL2.1.24) from the HOUSING BASE 150.
10) Remove the GEAR LEVER LOCK from the HOUSING BASE 150.
11) Remove the 2 screws (gold tapping, 6mm) securing the STOPPER GEAR (PL2.1.28), and remove the STOPPER GEAR and SPRING STOPPER GEAR (PL2.1.27) from the HOUSING BASE 150.

NOTE **When removing the STOPPER GEAR, be careful not to lose the SPRING STOPPER GEAR.**

Replacement

NOTE **When installing, be sure to lift up the PLATE ASSY BTM. If the PLATE ASSY BTM is inclined, a paper skew or jam may occur. Check after the installation is completed.**

1) Put the SPRING STOPPER GEAR (PL2.1.27) into the STOPPER GEAR (PL2.1.28), and secure the STOPPER GEAR to the HOUSING BASE 150 (PL2.1.36) using the 2 screws (gold tapping, 6mm).

NOTE **When installing the STOPPER GEAR, be careful not to lose the SPRING STOPPER GEAR.**

NOTE **Install the STOPPER GEAR so that one end of the SPRING STOPPER GEAR is in contact with the plate locatede on the back of the HOUSING BASE 150 as shown in the figure. (Refer to NOTE 2.)**

2) Install the GEAR LEVER LOCK (PL2.1.25) to the HOUSING BASE 150.
3) Install the SPRING BTM LOCK (PL2.1.14) to the projection of the RACK BTM LOCK 150 (PL2.1.21), and install them to the HOUSING BASE 150.

NOTE **When installing the RACK BTM LOCK150, be sure to install it with the LEVER BTM LOCK lifted up. After installing, push down the LEVER BTM LOCK and then release the finger from it, check that the projection of the LEVER BTM LOCK is hit the stopper of the HOUSING BASE150 and the triangle mark is placed above the stopper.**

4) Install the GEAR BTM LOCK PINION (PL2.1.23) to the HOUSING BASE 150, and engage the gear.
5) Secure the COVER BTM UP 150 (PL2.1.22) to the HOUSING BASE 150 using the screw (gold tapping, 6mm).

6) Install the GEAR PB R (PL2.1.20) to the SHAFT PB (PL2.1.9), and secure it with the hook.

NOTE **Be sure to install the hook of the GEAR PB R into the groove of the SHAFT PB.**

7) Install the PLATE GEAR LOCK 150 (PL2.1.19) to the HOUSING BASE 150, and secure it with the hook.
8) Secure the PLATE GEAR LOCK 150 using the screw (gold tapping, 8mm).
9) Push the PLATE ASSY BTM (PL2.1.10) downward to lock.

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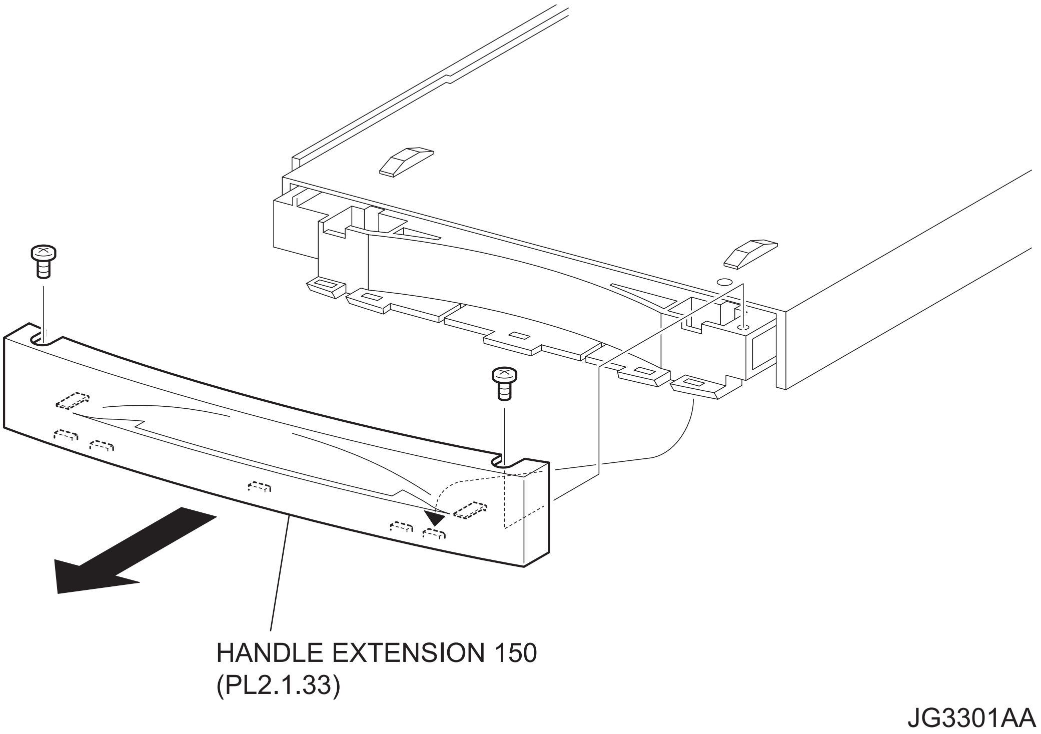
RRP2.7 HANDLE EXTENSION 150 (PL2.1.33)


HANDLE EXTENSION 150
(PL2.1.33)
JG3301AA

Removal

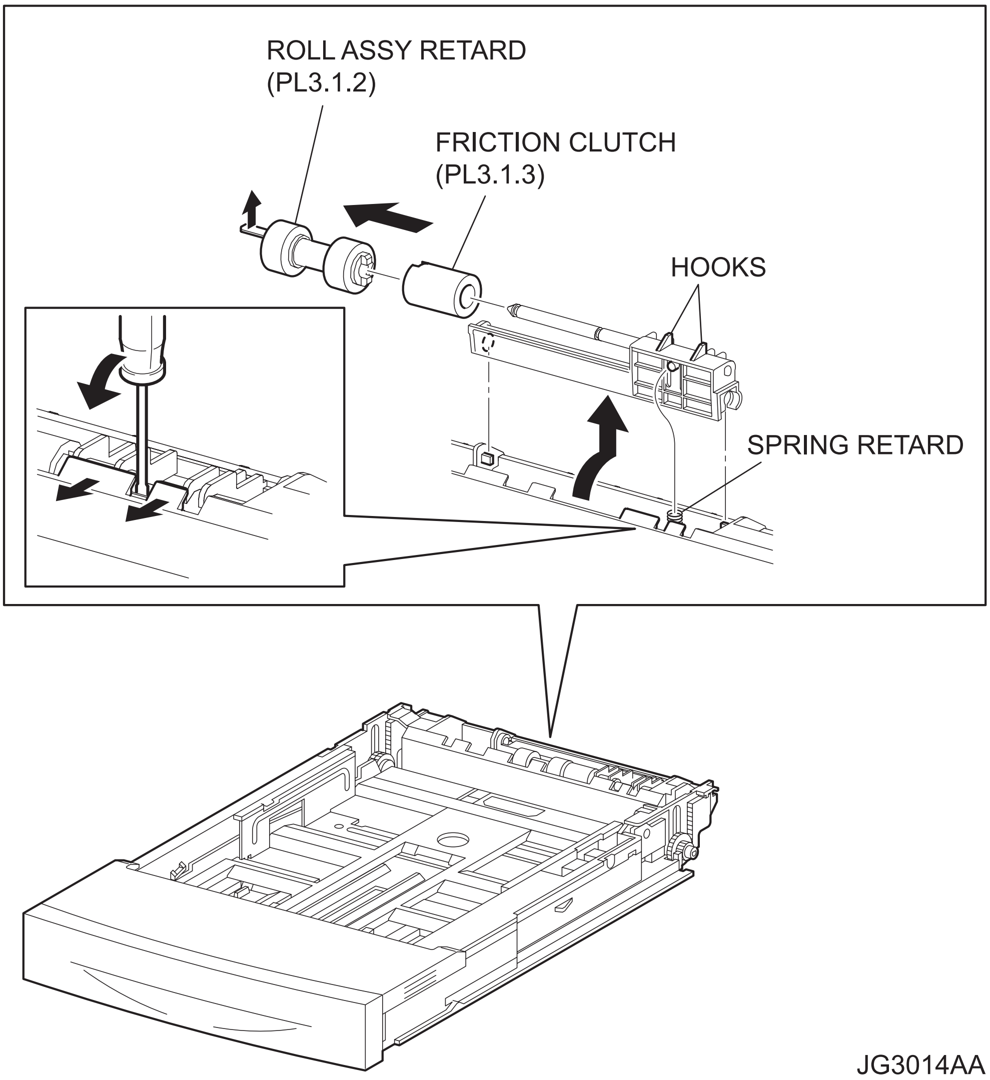
1) Remove the COVER CST (PL2.1.1) from the 150 PAPER CASSETTE.
2) Remove the 2 screws on the back side of the HANDLE EXTENSION 150 (PL2.1.33).
3) Release the 5 hooks at the upper side and the 2 hooks at the lower side of the HANDLE EXTENSION 150(PL2.1.33), then, remove the HANDLE EXTENSION 150 (PL2.1.33) from the HOUSING EXTENSION 150 (PL2.1.34).

Replacement

1) Put the 5 hooks on the upper side and 2 hooks on the lower side of the HANDLE EXTENSION 150 (PL2.1.33) to the HOUSING EXTENSION 150 (PL2.1.34).
2) Secure the HANDLE EXTENSION 150 (PL2.1.33) to the HOUSING EXTENSION 150 (PL2.1.34) using the 2 screws.
3) Install the COVER CST (PL2.1.1) to the 150 PAPER CASSETTE.

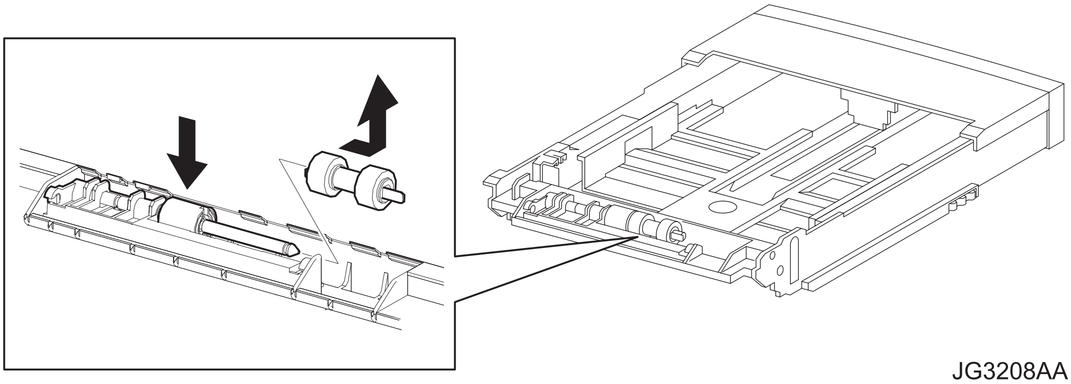
RRP3. 250 Paper Cassette

RRP3.1   ROLL ASSY RETARD (PL3.1.2)


ROLL ASSY RETARD
(PL3.1.2)
FRICTION CLUTCH
(PL3.1.3)
HOOKS
SPRING RETARD

JG3014AA

NOTE **Other than the procedure above, it is possible to remove the ROLL ASSY RETARD by pushing down the HOLDER RETARD.**



JG3208AA

Removal

1) Pull out the 250 PAPER CASSETTE from the printer.
2) Release the hooks securing the HOLDER RETARD (PL3.1.5) to the 250 PAPER CASSETTE using a screwdriver or the like.
3) Lift up the HOLDER RETARD in the direction of the arrow, and remove it.
4) Release the hook securing the ROLL ASSY RETARD, and pull it out from the SHAFT RETARD (PL3.1.4).

NOTE **When removing, do not hold the rubber rollers of the ROLL ASSY RETARD.**

NOTE **When removing HOLDER RETARD, be careful not to lose SPRING RETARD.**

Replacement

1) Install the ROLL ASSY RETARD to the SHFT RETARD (PL3.1.4), and secure the ROLL ASSY RETARD with the hook.

NOTE **When installing, do not hold the rubber rollers of the ROLL ASSY RETARD.**

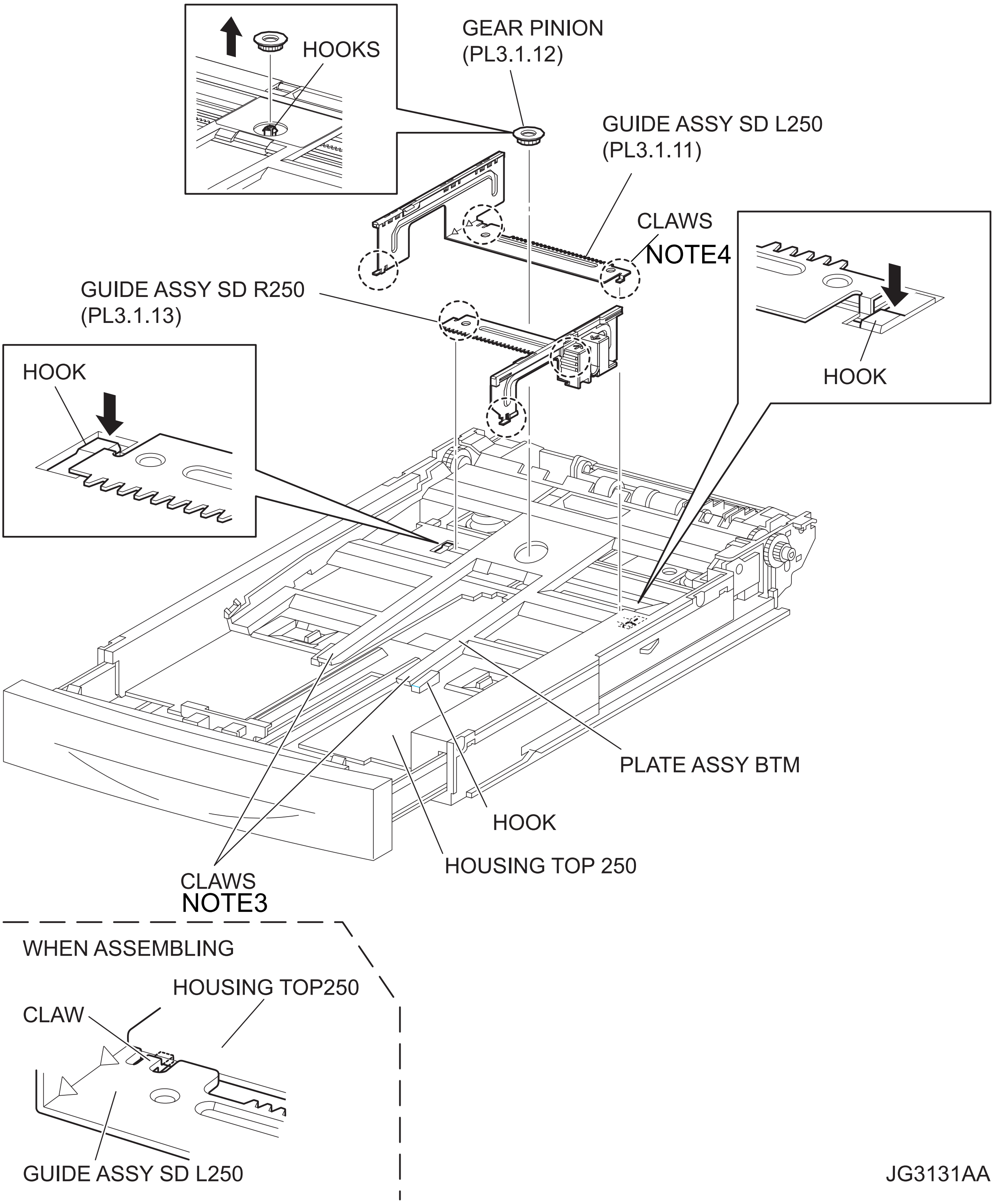
NOTE **Be sure to install the hook of the ROLL ASSY RETARD into the groove of the SHAFT RETARD.**

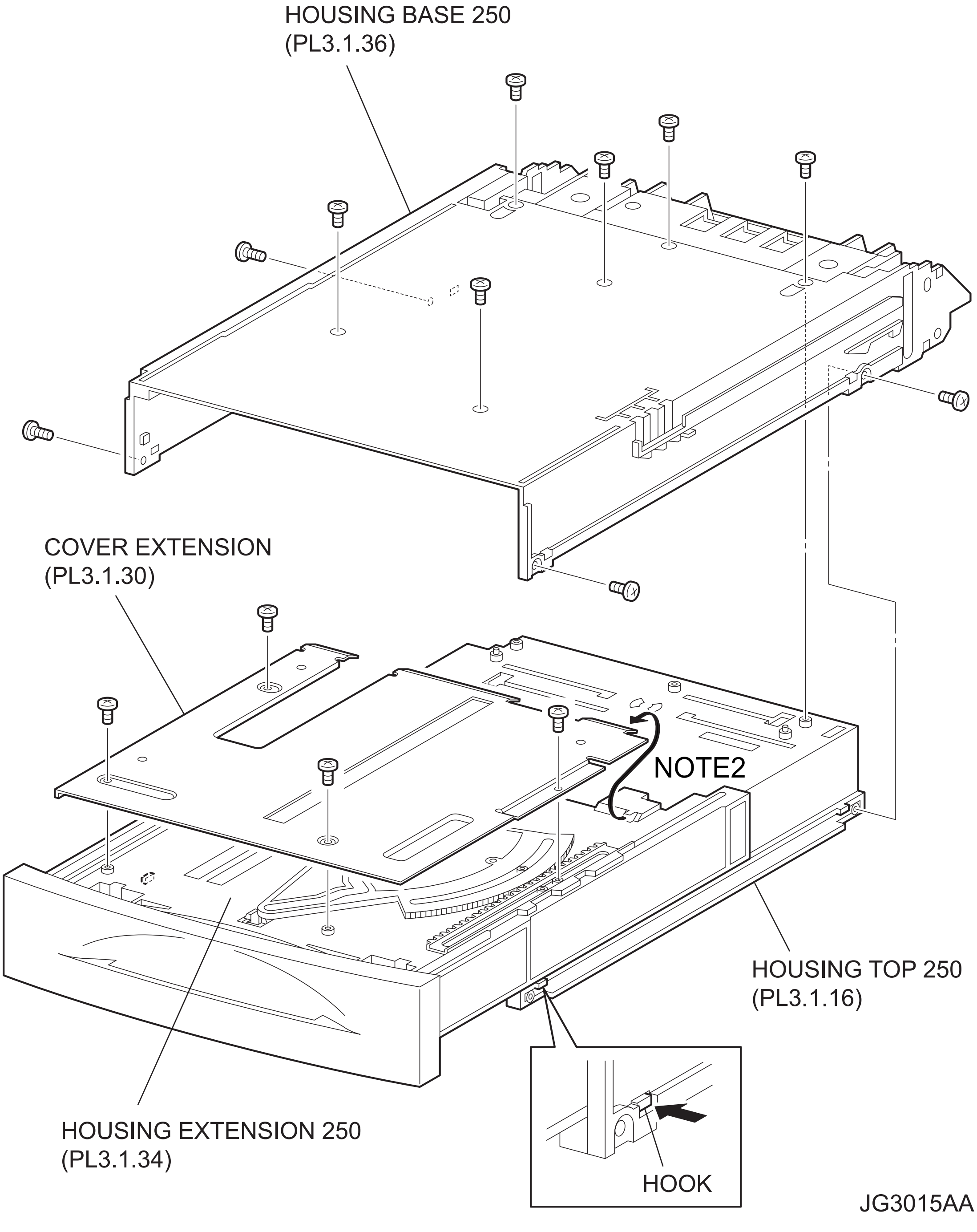
2) Move the HOLDER RETARD (PL3.1.5) in the opposite direction of the arrow, and install it to the 250 PAPER CASSETTE.

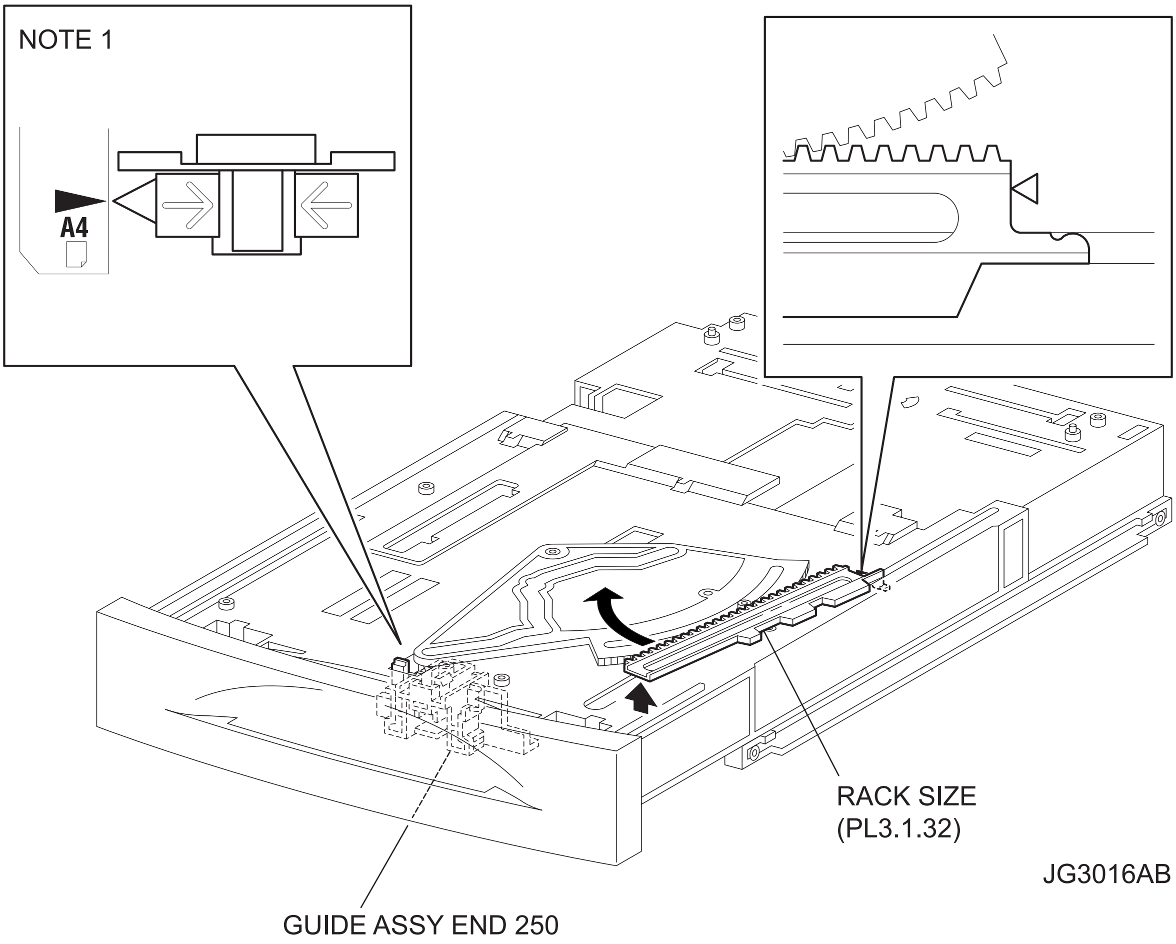
NOTE **After installing, make sure the HOLDER RETARD comes back to the former position with the spring force of the SPRING RETARD (PL3.1.6), when pushing down the HOLDER RETARD and then release the finger from it.**

3) Install the 250 PAPER CASSETTE to the printer.

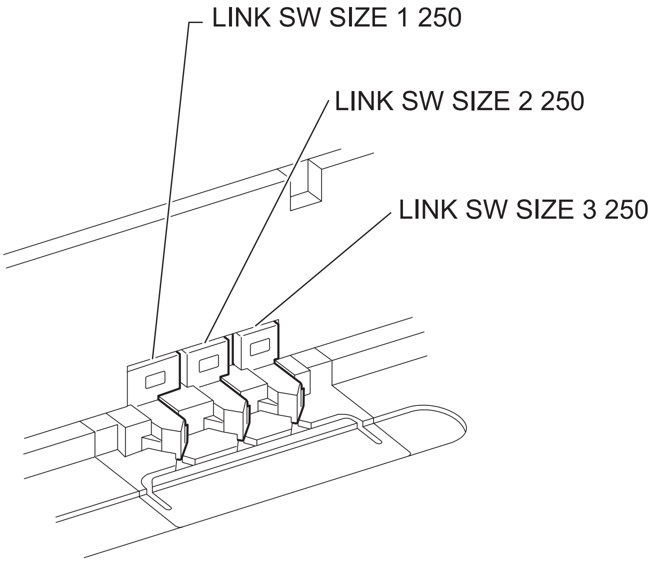
RRP3.2 RACK SIZE (PL3.1.32)


HOOKS
GEAR PINION
(PL3.1.12)
GUIDE ASSY SD L250
(PL3.1.11)
CLAWS
NOTE4
GUIDE ASSY SD R250
(PL3.1.13)
HOOK
HOOK
PLATE ASSY BTM
HOOK
HOUSING TOP 250
CLAWS
NOTE3
WHEN ASSEMBLING
HOUSING TOP250
CLAW
GUIDE ASSY SD L250
JG3131AA


HOUSING BASE 250
(PL3.1.36)
COVER EXTENSION
(PL3.1.30)
NOTE2
HOUSING TOP 250
(PL3.1.16)
HOUSING EXTENSION 250
(PL3.1.34)
HOOK
JG3015AA


NOTE 1
A4
RACK SIZE
(PL3.1.32)
GUIDE ASSY END 250

JG3016AB


LINK SW SIZE 1 250
LINK SW SIZE 2 250
LINK SW SIZE 3 250

JG3211AB

Removal

1) Remove the COVER CST (PL3.1.1) from the 250 PAPER CASSETTE.
2) Release the lock of the LOCK EXTENSION, and draw out the cassette extension as far as it will go.
3) Release the hooks securing the GEAR PINION (PL3.1.12) to the HOUSING TOP 250 (PL3.1.16), and remove the GEAR PINION.
4) While pressing down the lock of the STOPPER GEAR (PL3.1.28), release the lock of the LEVER BTM LOCK (PL3.1.26) to lift up the PLATE ASSY BTM (PL3.1.10). (Figure 3.5)
5) Slide the GUIDE ASSY SD L250 (PL3.1.11) inward, and remove it from the HOUSING TOP 250 by pressing down the hook of the HOUSING TOP 250.
6) Slide the GUIDE ASSY SD R250 (PL3.1.13) inward, and remove it from the HOUSING TOP 250 by pressing down the hook of the HOUSING TOP 250.
7) Remove the 2 screws (gold tapping, 8mm) from both right and left sides, as well as 6 the screws (gold tapping, 8mm) on the back, that secure the HOUSING TOP 250 to the HOUSING BASE 250 (PL3.1.36).
8) Release the 4 hooks of the HOUSING TOP 250, and remove the HOUSING TOP 250 and HOUSING EXTENSION 250 (PL3.1.34) from the HOUSING BASE 250.
9) Remove the 4 screws (gold tapping, 6mm) securing the COVER EXTENSION (PL3.1.30) to the HOUSING EXTENSION 250.
10) Remove the COVER EXTENSION from the HOUSING EXTENSION 250.
11) Lift the front of the RACK SIZE a little, and turn it in the direction of the arrow to remove it from the HOUSING EXTENSION 250.

Replacement

1) Put the hook of the top of the RACK SIZE into the gfroove of the HOUSING EXTENSION 250 (PL3.1.34), and turn it in the opposite direction of the arrow.
2) Align the end of the RACK SIZE with the triangle mark printed on the HOUSING EXTENSION 250 as shown in the figure, and install the RACK SIZE to the HOUSING EXTENSION 250.

NOTE **When installing the RACK SIZE, be sure to draw out the GUIDE ASSY END 250 (PL3.1.35) as far as it will go.(NOTE1).**

3) Install the COVER EXTENSION (PL3.1.30) to the HOUSING EXTENSION 250 using the 4 screws (gold tapping, 6mm).

NOTE **When installing, make sure the COVER EXTENSION is inserted under 3 claws of the HOUSING EXTENSION 250.(NOTE2).**

NOTE **Use 6mm size of fixed screw. If 8mm size of screw is used, HOUSING EXTENSION 250 doesn't operate smoothly and LOCK EXTENSION 250 doesn't operate correctly.**

4) Install the HOUSING EXTENSION 250 and HOUSING TOP 250 (PL3.1.16) to the HOUSING BASE 250 while pushing the LINK SW SIZE1-250 (PL3.1.37), LINK SW SIZE2-250 (PL3.1.38) and LINK SW SIZE3-250 (PL3.1.39) of the HOUSING BASE 250 outward as shown in the figure.

NOTE **Be sure to put 2 claws on the top of the PLATE ASSY BTM under the hooks on the HOUSING TOP 250.(NOTE3).**

5) After assembling the HOUSING TOP 250 to the HOUSING BASE 250 using the 4 hooks, secure them using the 2 screws (gold tapping, 8mm) on both right and left side, as well as the 6 screws (gold tapping, 8mm) on the back.

NOTE **After tightening the screws, move the GUIDE ASSY END 250 back and forth, and make sure that the LINK SW SIZEs operate smoothly.**

6) While pressing down the hook of the HOUSING TOP 250, install the GUIDE ASSY SD R250 (PL3.1.13) to the HOUSING TOP 250.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD R250 sit correctly in the grooves of the HOUSING TOP 250.(NOTE4).**

7) While pressing down the hook of the HOUSING TOP 250, install the GUIDE ASSY SD L250 (PL3.1.11) to the HOUSING TOP 250.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD L250 sit correctly in the grooves of the HOUSING TOP 250.(NOTE4).**

8) Push the PLATE ASSY BTM downward to lock.
9) With completely opened GUIDE ASSY SD L250 (PL3.1.11) and GUIDE ASSY SD R250 (PL3.1.13) to the both sides,install the GEAR PINION (PL3.1.12) to the HOUSING TOP 250.

NOTE **When installing the GEAR PINION, make sure the GUIDE ASSY SD R250 and GUIDE ASSY SD L250 are completely opened. If not, the side register may be misaligned.**

10) Install the COVER CST (PL3.1.1) to the 250 PAPER CASSETTE.

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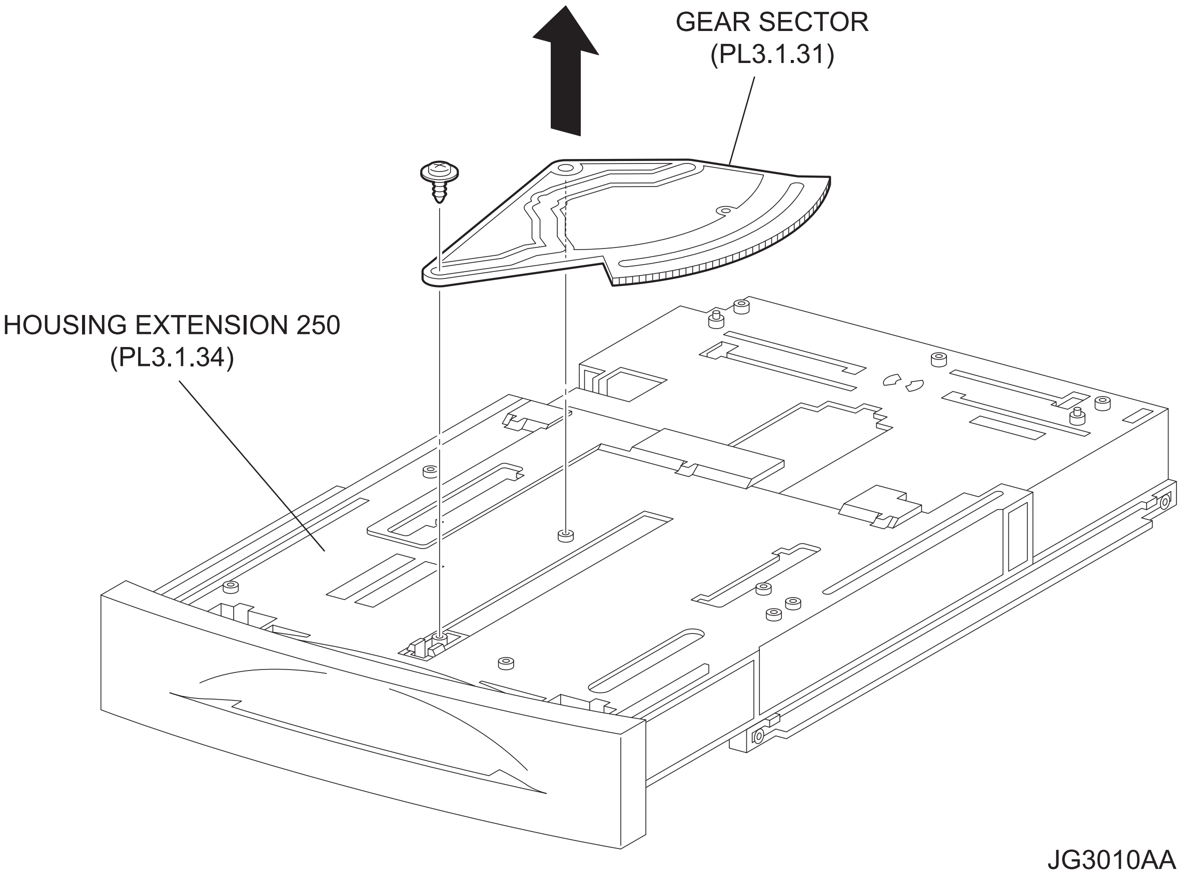
RRP3.3 GEAR SECTOR (PL3.1.31)


GEAR SECTOR
(PL3.1.31)
HOUSING EXTENSION 250
(PL3.1.34)

JG3010AA

Removal

1) Remove the COVER CST (PL3.1.1) from the 250 PAPER CASSETTE.
2) Release the lock of the LOCK EXTENSION, and draw out the cassette extension as far as it will go.
3) Release the hooks securing the GEAR PINION (PL3.1.12) to the HOUSING TOP 250 (PL3.1.16), and remove the GEAR PINION.
4) While pressing down the lock of the STOPPER GEAR (PL3.1.28), release the lock of the LEVER BTM LOCK (PL3.1.26) to lift up the PLATE ASSY BTM (PL3.1.10). (Figure 3.5)
5) Slide the GUIDE ASSY SD L250 (PL3.1.11) inward, and remove it from the HOUSING TOP 250 by pressing down the hook of the HOUSING TOP 250.
6) Slide the GUIDE ASSY SD R250 (PL3.1.13) inward, and remove it from the HOUSING TOP 250 by pressing down the hook of the HOUSING TOP 250.
7) Remove the 2 screws (gold tapping, 8mm) from both right and left sides, as well as 6 the screws (gold tapping, 8mm) on the back, that secure the HOUSING TOP 250 to the HOUSING BASE 250 (PL3.1.36).
8) Release the 4 hooks of the HOUSING TOP 250, and remove the HOUSING TOP 250 and HOUSING EXTENSION 250 (PL3.1.34) from the HOUSING BASE 250.
9) Remove the 4 screws (gold tapping, 6mm) securing the COVER EXTENSION (PL3.1.30) to the HOUSING EXTENSION 250.
10) Remove the COVER EXTENSION from the HOUSING EXTENSION 250.
11) Remove the RACK SIZE (PL3.1.32). (RRP3.2)
12) Remove the screw (black with flange, 8mm) securing the GEAR SECTOR.
13) Remove the GEAR SECTOR from the HOUSING EXTENSION 250.

Replacement

1) Install the GEAR SECTOR to the HOUSING EXTENSION 250 (PL3.1.34).
2) Secure the GEAR SECTOR using the screw (black with flange, 8mm).
3) Install the RACK SIZE 250 (PL3.1.32). (RRP3.2)
4) Install the COVER EXTENSION (PL3.1.30) to the HOUSING EXTENSION 250 using the 4 screws (gold tapping, 6mm).

NOTE **When installing, make sure the COVER EXTENSION is inserted under 3 claws of the HOUSING EXTENSION 250.**

NOTE **Use 6mm size of fixed screw. If 8mm size of screw is used, HOUSING EXTENSION 250 doesn't operate smoothly and LOCK EXTENSION 250 doesn't operate correctly.**

5) Install the HOUSING EXTENSION 250 and HOUSING TOP 250 (PL3.1.16) to the HOUSING BASE 250 while pushing the LINK SW SIZE1-250 (PL3.1.37), LINK SW SIZE2-250 (PL3.1.38) and LINK SW SIZE3-250 (PL3.1.39) of the HOUSING BASE 250 outward as shown in the figure. (Figure 3.2)

NOTE **Be sure to put 2 claws that on the top of the PLATE ASSY BTM under the hooks on the HOUSING TOP 250.**

6) After assembling the HOUSING TOP 250 to the HOUSING BASE 250 using the 4 hooks, secure them using the 2 screws (gold tapping, 8mm) on both right and left sides, as well as the 6 screws (gold tapping, 8mm) on the back.

NOTE **After tightening the screws, move the GUIDE ASSY END 250 back and forth, and make sure that the LINK SW SIZEs operate smoothly.**

7) While pressing down the hook of the HOUSING TOP 250, install the GUIDE ASSY SD R250 (PL3.1.13) to the HOUSING TOP 250.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD R250 sit correctly in the grooves of the HOUSING TOP 250.**

8) While pressing down the hook of the HOUSING TOP 250, install the GUIDE ASSY SD L250 (PL3.1.11) to the HOUSING TOP 250.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD L250 sit correctly in the grooves of the HOUSING TOP 250.**

9) Push the PLATE ASSY BTM downward to lock.
10) With completely opened GUIDE ASSY SD L250 (PL3.1.11) and GUIDE ASSY SD R250 (PL3.1.13) to the both sides,install the GEAR PINION (PL3.1.12) to the HOUSING TOP 250.

NOTE **When installing the GEAR PINION, make sure the GUIDE ASSY SD R250 and GUIDE ASSY SD L250 are completely opened. If not, the side register may be misaligned.**

11) Install the COVER CST (PL3.1.1) to the 250 PAPER CASSETTE.

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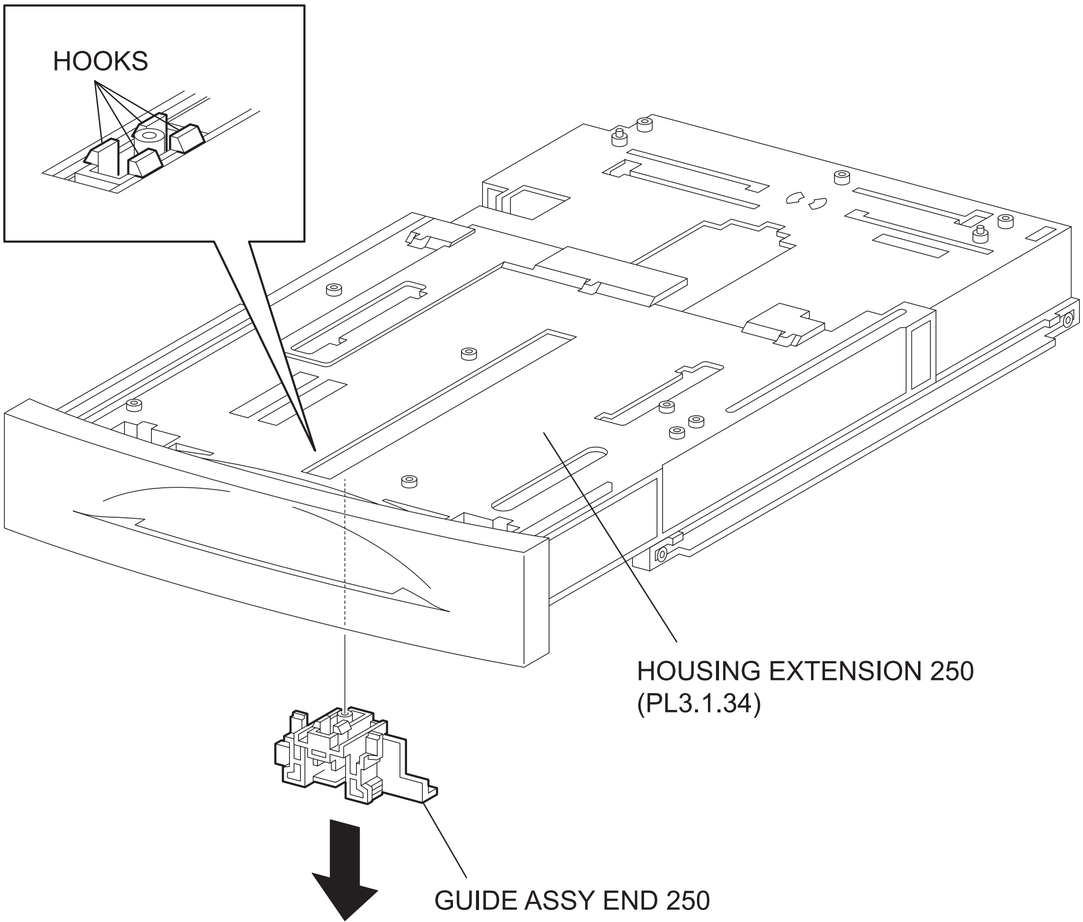
RRP3.4 GUIDE ASSY END 250 (PL3.1.35)


HOOKS
HOUSING EXTENSION 250
(PL3.1.34)
GUIDE ASSY END 250
(PL3.1.35)

JG3117AA

Removal

1) Remove the COVER CST (PL3.1.1) from the 250 PAPER CASSETTE.
2) Release the lock of the LOCK EXTENSION, and draw out the cassette extension as far as it will go.
3) Release the hooks securing the GEAR PINION (PL3.1.12) to the HOUSING TOP 250 (PL3.1.16), and remove the GEAR PINION.
4) While pressing down the lock of the STOPPER GEAR (PL3.1.28), release the lock of the LEVER BTM LOCK (PL3.1.26) to lift up the PLATE ASSY BTM (PL3.1.10). (Figure 3.5)
5) Slide the GUIDE ASSY SD L250 (PL3.1.11) inward, and remove it from the HOUSING TOP 250 by pressing down the hook of the HOUSING TOP 250.
6) Slide the GUIDE ASSY SD R250 (PL3.1.13) inward, and remove it from the HOUSING TOP 250 by pressing down the hook of the HOUSING TOP 250.
7) Remove the 2 screws (gold tapping, 8mm) from both right and left sides, as well as the 6 screws (gold tapping, 8mm) on the back, that secure the HOUSING TOP 250 to the HOUSING BASE 250 (PL3.1.36).
8) Release the 4 hooks of the HOUSING TOP 250, and remove the HOUSING TOP 250 and HOUSING EXTENSION 250 (PL3.1.34) from the HOUSING BASE 250.
9) Remove the 4 screws (gold tapping, 6mm) securing the COVER EXTENSION (PL3.1.30) to the HOUSING EXTENSION 250.
10) Remove the COVER EXTENSION from the HOUSING EXTENSION 250.
11) Remove the RACK SIZE (PL3.1.32). (RRP3.2)
12) Remove the GEAR SECTOR (PL3.1.31) (RRP3.3)
13) Release the hooks securing the GUIDE ASSY END 250 to the HOUSING EXTENSION 250 (PL3.1.34).

NOTE **Be careful handling the hooks of the GUIDE ASSY END 250. They are fragile and could break if given excessive force.**

14) Remove the GUIDE ASSY END 250 from the HOUSING EXTENSION 250.

Replacement

1) Secure the GUIDE ASSY END 250 to the HOUSING EXTENSION 250 (PL3.1.34) using the 4 hooks.
2) Install the GEAR SECTOR (PL3.1.31). (RRP3.3)
3) Install the RACK SIZE (PL3.1.32). (RRP3.2)
4) Install the COVER EXTENSION (PL3.1.30) to the HOUSING EXTENSION 250 using the 4 screws (gold tapping, 6mm).

NOTE **When installing, make sure the COVER EXTENSION is inserted under 3 claws of the HOUSING EXTENSION 250.**

NOTE **Use 6mm size of fixed screw. If 8mm size of screw is used, HOUSING EXTENSION 250 doesn't operate smoothly and LOCK EXTENSION 250 doesn't operate correctly.**

5) Install the HOUSING EXTENSION 250 and HOUSING TOP 250 (PL3.1.16) to the HOUSING BASE 250 while pushing the LINK SW SIZE1-250 (PL3.1.37), LINK SW SIZE2-250 (PL3.1.38) and LINK SW SIZE3-250 (PL3.1.39) of the HOUSING BASE 250 outward as shown in the figure. (Figure 3.2)

NOTE **Be sure to put 2 claws that on the top of the PLATE ASSY BTM under the hooks on the HOUSING TOP 250.**

6) After assembling the HOUSING TOP 250 to the HOUSING BASE 250 using the 4 hooks, secure them using the 2 screws (gold tapping, 8mm) on both right and left sides, as well as the 6 screws (gold tapping, 8mm) on the back.

NOTE **After tightening the screws, move the GUIDE ASSY END 250 back and forth, and make sure that the LINK SW SIZEs operate smoothly.**

7) While pressing down the hook of the HOUSING TOP 250, install the GUIDE ASSY SD R250 (PL3.1.13) to the HOUSING TOP 250.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD R250 sit correctly in the grooves of the HOUSING TOP 250.**

8) While pressing down the hook of the HOUSING TOP 250, install the GUIDE ASSY SD L250 (PL3.1.11) to the HOUSING TOP 250.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD L250 sit correctly in the grooves of the HOUSING TOP 250.**

9) Push the PLATE ASSY BTM downward to lock.
10) With completely opened GUIDE ASSY SD L250 (PL3.1.11) and GUIDE ASSY SD R250 (PL3.1.13) to the both sides,install the GEAR PINION (PL3.1.12) to the HOUSING TOP 250.

NOTE **When installing the GEAR PINION, make sure the GUIDE ASSY SD R250 and GUIDE ASSY SD L250 are completely opened. If not, the side register may be misaligned.**

11) Install the COVER CST (PL3.1.1) to the 250 PAPER CASSETTE.

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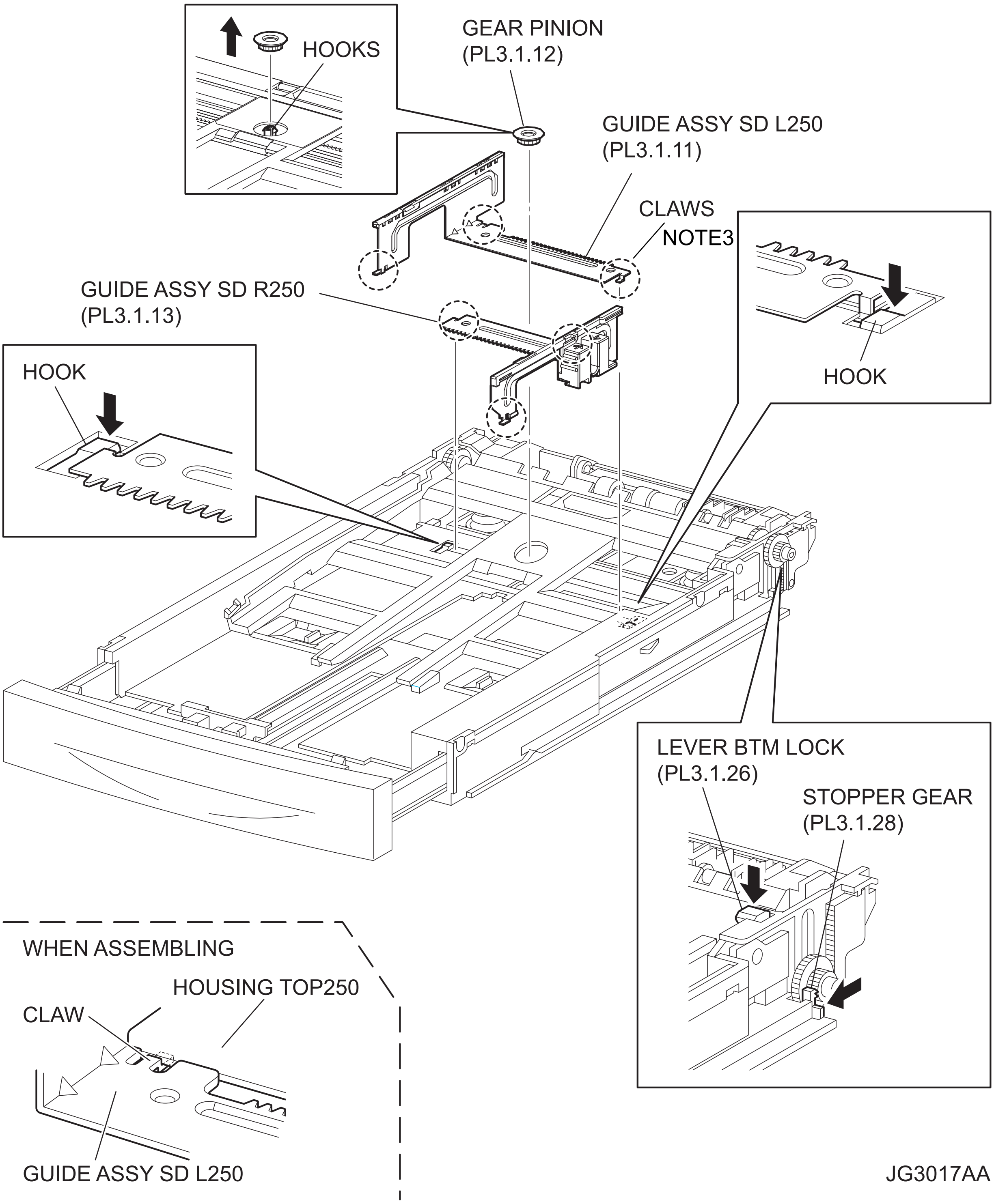
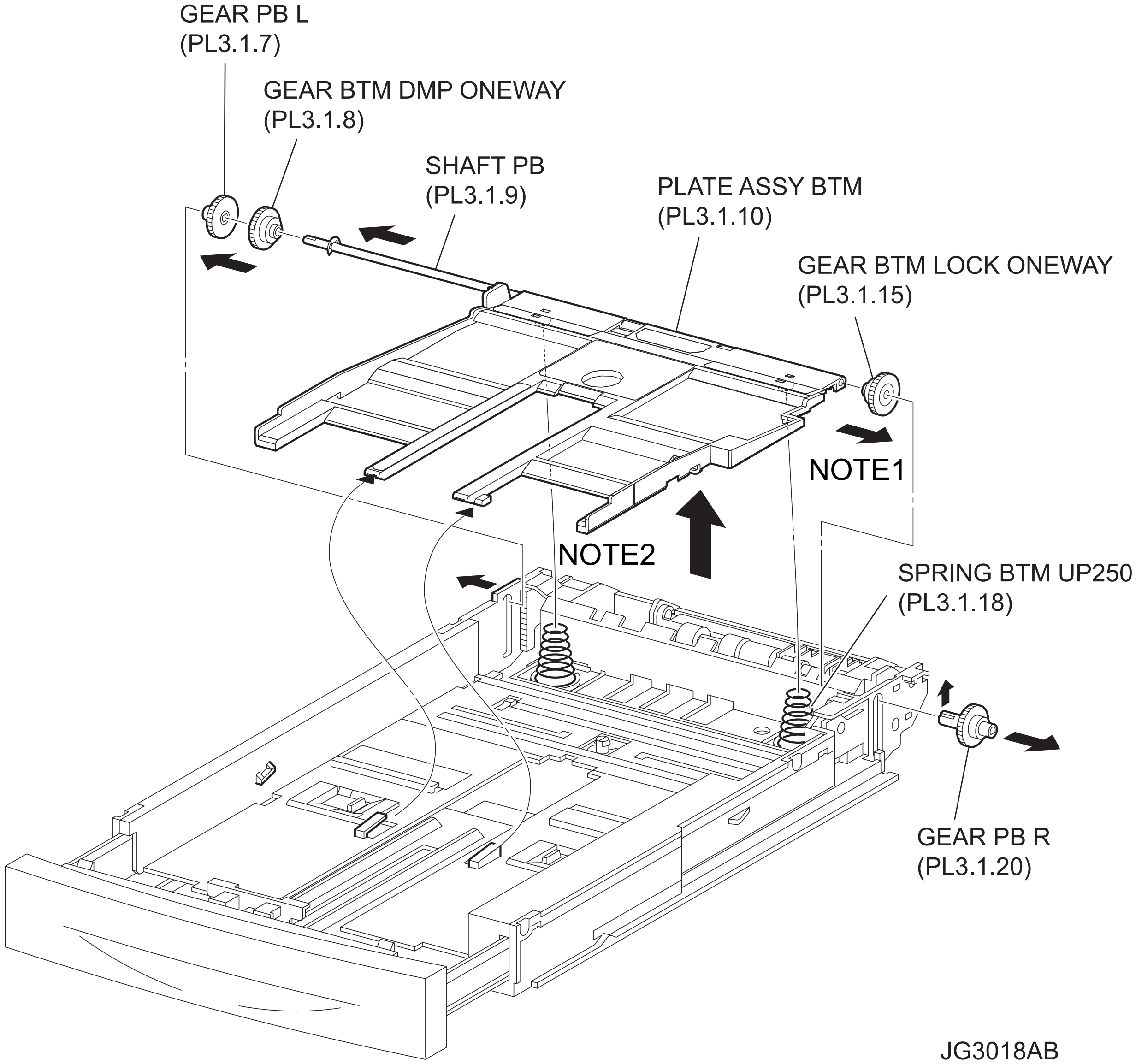
RRP3.5   PLATE ASSY BTM (PL3.1.10)


HOOKS
GEAR PINION
(PL3.1.12)
GUIDE ASSY SD L250
(PL3.1.11)
CLAWS
NOTE3
GUIDE ASSY SD R250
(PL3.1.13)
HOOK
HOOK
LEVER BTM LOCK
(PL3.1.26)
STOPPER GEAR
(PL3.1.28)
WHEN ASSEMBLING
HOUSING TOP250
CLAW
GUIDE ASSY SD L250
JG3017AA


GEAR PB L
(PL3.1.7)
GEAR BTM DMP ONEWAY
(PL3.1.8)
SHAFT PB
(PL3.1.9)
PLATE ASSY BTM
(PL3.1.10)
GEAR BTM LOCK ONEWAY
(PL3.1.15)
NOTE1
NOTE2
SPRING BTM UP250
(PL3.1.18)
GEAR PB R
(PL3.1.20)
JG3018AB

Removal

1) Remove the COVER CST (PL3.1.1) from the 250 PAPER CASSETTE.
2) Release the lock of the LOCK EXTENSION, and draw out the cassette extension as far as it will go.
3) Release the hooks securing the GEAR PINION (PL3.1.12) to the HOUSING TOP 250 (PL3.1.16), and remove the GEAR PINION.
4) While pressing down the lock of the STOPPER GEAR (PL3.1.28), release the lock of the LEVER BTM LOCK (PL3.1.26) to lift up the PLATE ASSY BTM.
5) Slide the GUIDE ASSY SD L250 (PL3.1.11) inward, and remove it from the HOUSING TOP 250 by pressing down the hook of the HOUSING TOP 250.
6) Slide the GUIDE ASSY SD R250 (PL3.1.13) inward, and remove it from the HOUSING TOP 250 by pressing down the hook of the HOUSING TOP 250.

NOTE **In the following steps, the GEAR PB L, GEAR BTM DMP ONEWAY (PL3.1.8) and GEAR BTM LOCK ONEWAY (PL3.1.15) will be detached. Be careful not to lose these gears.**

7) Release the hook of the GEAR PB R (PL3.1.20), and remove it from the SHAFT PB (PL3.1.9).

NOTE **It is hard to remove GEAR PB R. When removing it, be careful not to break it.**

8) Disengage the GEAR PB L from the PLATE GEAR LOCK 250 while bending the HOUSING BASE 250 in the dirction of the arrows. Remove the PLATE ASSY BTM together with the SHAFT PB, GEAR PB L, GEAR BTM DMP ONEWAY, and GEAR BTM LOCK ONEWAY from the HOUSING TOP 250.
9) Pull out the SHAFT PB from the PLATE ASSY BTM, and remove the GEAR PB L, GEAR BTM DMP ONEWAY and GEAR BTM LOCK ONEWAY.

Replacement

1) Insert the SHAFT PB into the PLATE ASSY BTM, and insert the GEAR BTM DMP ONEWAY, GEAR PB L and GEAR BTM LOCK ONEWAY to the SHAFT PB.
2) While disengaging the GEAR PB L, install the assembled PLATE ASSY BTM to the HOUSING TOP 250 (PL3.1.16).

NOTE **When installing the PLATE ASSY BTM, be sure to put 2 SPRING BTM UP 250s (PL3.1.18) into the bosses on the back of the PLATE ASSY BTM.(NOTE1).**

NOTE **Be sure to put 2 claws that on the top of the PLATE ASSY BTM under the hooks on the HOUSING TOP 250.(NOTE2).**

3) Install the GEAR PB R (PL3.1.20) to the SHAFT PB (PL3.1.9), and secure it with the hook.

NOTE **Be sure to install the hook of the GEAR PB R into the groove of the SHAFT PB.**

NOTE **When installing the GEAR PB R, be sure to lift up the PLATE ASSY BTM. If the PLATE ASSY BTM is inclined, a paper skew or jam may occur. Check after the installation is completed.**

4) While pressing down the hook of the HOUSING TOP 250, install the GUIDE ASSY SD R250 (PL3.1.13) to the HOUSING TOP 250.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD R250 sit correctly in the grooves of the HOUSING TOP 250.(NOTE3).**

5) While pressing down the hook of the HOUSING TOP 250, install the GUIDE ASSY SD L250 (PL3.1.11) to the HOUSING TOP 250.

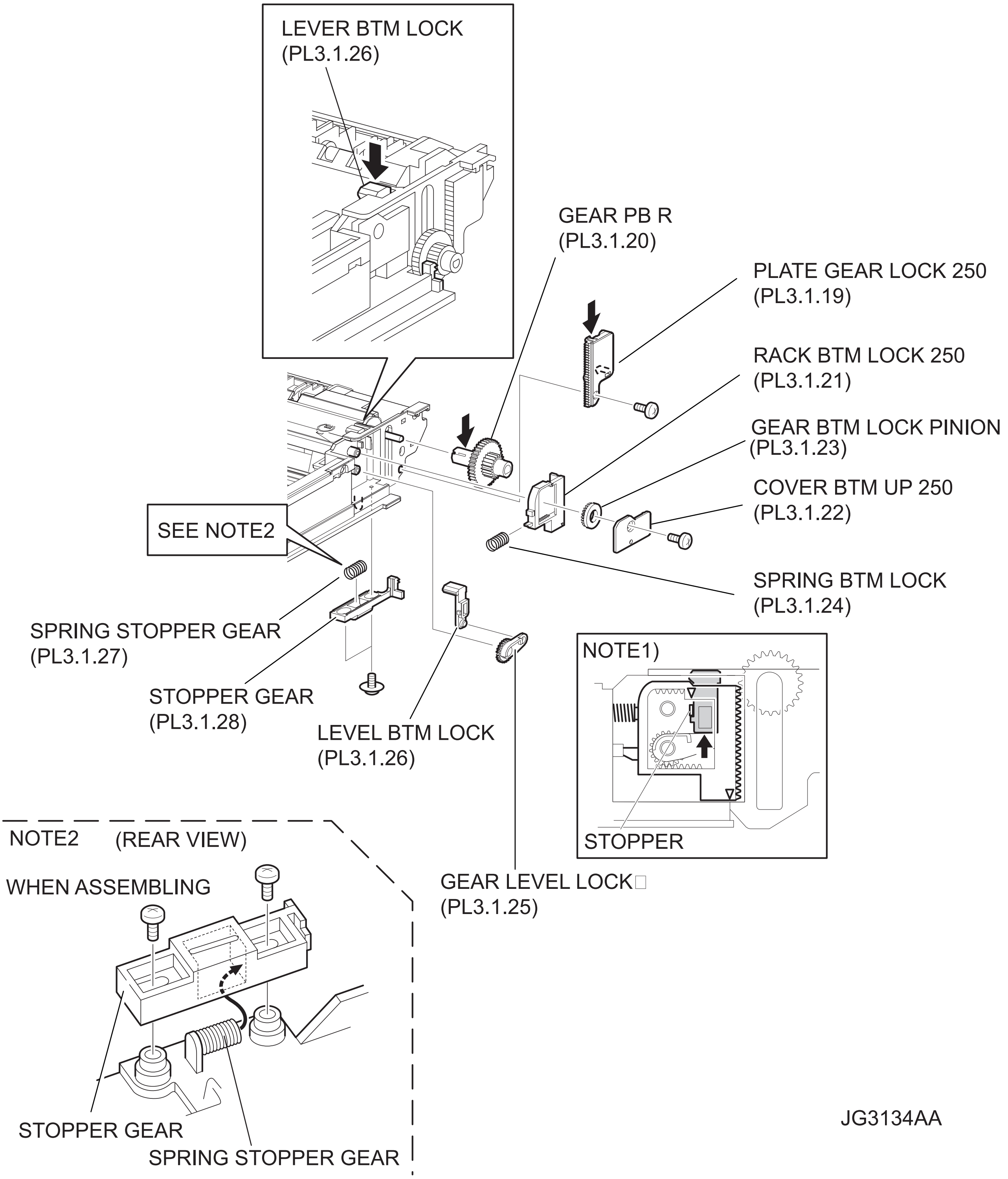
NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD L250 sit correctly in the grooves of the HOUSING TOP 250.**

6) Push the PLATE ASSY BTM downward to lock.
7) Install the GEAR PINION (PL3.1.12) to the HOUSING TOP 250 (PL3.1.16).

NOTE **When installing the GEAR PINION, make sure the GUIDE ASSY SD R250 and GUIDE ASSY SD L250 are completely opened. If not, the side register may be misaligned.**

8) Install the COVER CST (PL3.1.1) to the 250 PAPER CASSETTE.

RRP3.6 GEAR LEVER LOCK (PL3.1.25), LEVER BTM LOCK (PL3.1.26)


LEVER BTM LOCK
(PL3.1.26)
GEAR PB R
(PL3.1.20)
PLATE GEAR LOCK 250
(PL3.1.19)
RACK BTM LOCK 250
(PL3.1.21)
GEAR BTM LOCK PINION
(PL3.1.23)
COVER BTM UP 250
(PL3.1.22)
SEE NOTE2
SPRING BTM LOCK
(PL3.1.24)
SPRING STOPPER GEAR
(PL3.1.27)
STOPPER GEAR
(PL3.1.28)
LEVEL BTM LOCK
(PL3.1.26)
NOTE1)
STOPPER
NOTE2 (REAR VIEW)
WHEN ASSEMBLING
GEAR LEVEL LOCK
(PL3.1.25)
STOPPER GEAR
SPRING STOPPER GEAR
JG3134AA

Removal

1) Remove the COVER CST (PL3.1.1) from the 250 PAPER CASSETTE.
2) Release the lock of the LOCK EXTENSION, and draw out the cassette extension as far as it will go.
3) While pressing down the lock of the STOPPER GEAR (PL3.1.28), release the lock of the LEVER BTM LOCK (PL3.1.26) to lift up the PLATE ASSY BTM (PL3.1.10).
4) Remove the screw (gold tapping, 8mm) securing the PLATE GEAR LOCK 250 (PL3.1.19) at the GEAR PB R (PL3.1.20) side.
5) Release the hook of the PLATE GEAR LOCK 250, and remove it from the HOUSING BASE 250 (PL3.1.36).
6) Release the hook of the GEAR PB R, and remove the GEAR PB R from the SHAFT PB (PL3.1.9).
7) Remove the screw (gold tapping, 6mm) securing the COVER BTM UP 250 (PL3.1.22), and remove it from the HOUSING BASE 250.
8) Remove the GEAR BTM LOCK PINION (PL3.1.23) from the HOUSING BASE 250.
9) Remove the RACK BTM LOCK 250 (PL3.1.21) together with the SPRING BTM LOCK (PL3.1.24) from the HOUSING BASE 250.
10) Remove the GEAR LEVER LOCK from the HOUSING BASE 250.
11) Remove the 2 screws (gold tapping, 6mm)securing the STOPPER GEAR (PL3.1.28), and remove the STOPPER GEAR and SPRING STOPPER GEAR (PL3.1.27) from the HOUSING BASE 250.

NOTE **When removing the STOPPER GEAR, be careful not to lose the SPRING STOPPER GEAR.**

Replacement

NOTE **When installing, be sure to lift up the PLATE ASSY BTM. If the PLATE ASSY BTM is inclined, a paper skew or jam may occur. Check after the installation is completed.**

1) Put the SPRING STOPPER GEAR (PL3.1.27) into the STOPPER GEAR (PL3.1.28), and secure the STOPPER GEAR to the HOUSING BASE 250 (PL3.1.36) using the 2 screws (gold tapping, 6mm).

NOTE **When installing the STOPPER GEAR, be careful not to lose the SPRING STOPPER GEAR.**

NOTE **Install the STOPPER GEAR so that one end of the SPRING STOPPER GEAR is in contact with the plate located on the back of the HOUSING BASE 250 as shown in the figure. (Refer to NOTE 2.)**

2) Install the GEAR LEVER LOCK to the HOUSING BASE 250.
3) Install the SPRING BTM LOCK (PL3.1.24) to the projection of the RACK BTM LOCK 250 (PL3.1.21), and install them to the HOUSING BASE 250.

NOTE **When installing the RACK BTM LOCK 250, be sure to install it with the LEVER BTM LOCK lifted up. After installing, push down the LEVER BTM LOCK and then release the finger from it, check that the projection of the LEVER BTM LOCK is hit the stopper of the HOUSING BASE 250 and the triangle mark is placed above the stopper.**

4) Install the GEAR BTM LOCK PINION (PL3.1.23) to the HOUSING BASE 250, and engage the gear.
5) Secure the COVER BTM UP 250 (PL3.1.22) to the HOUSING BASE 250 using the screw (gold tapping, 6mm).

6) Install the GEAR PB R (PL3.1.20) to the SHAFT PB (PL3.1.9), and secure it with the hook.

NOTE **Be sure to install the hook of the GEAR PB R into the groove of the SHAFT PB.**

7) Install the PLATE GEAR LOCK 250 (PL3.1.19) to the HOUSING BASE 250, and secure it with the hook.
8) Secure the PLATE GEAR LOCK 250 using the screw (gold tapping, 8mm).
9) Push the PLATE ASSY BTM (PL3.1.10) downward to lock.

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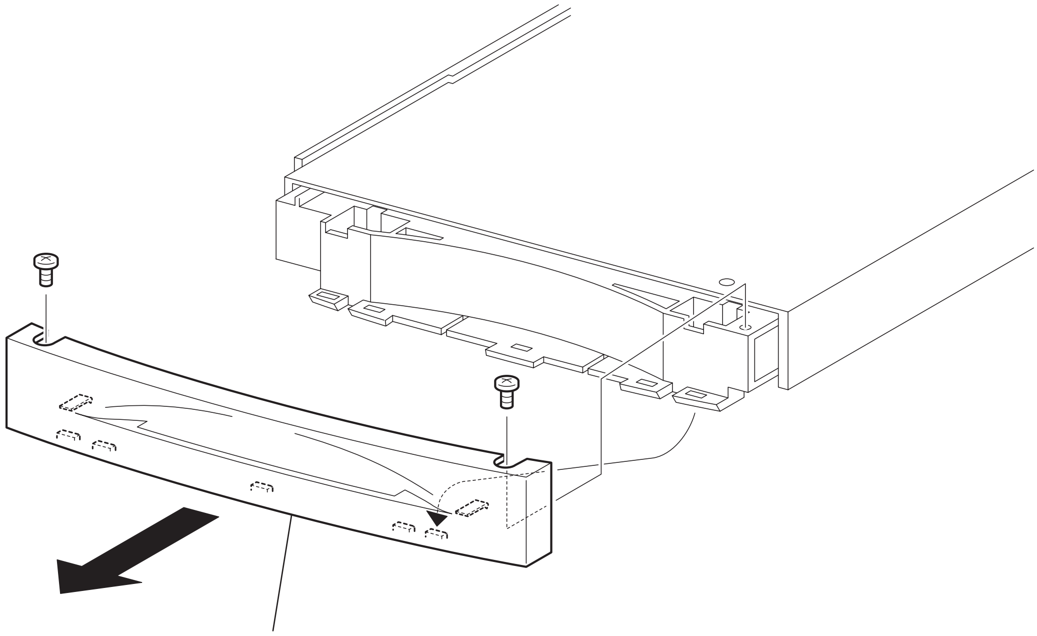
RRP3.7 HANDLE EXTENSION 250 (PL3.1.33)


HANDLE EXTENSION 250
(PL3.1.33)
JG3302AA

Removal

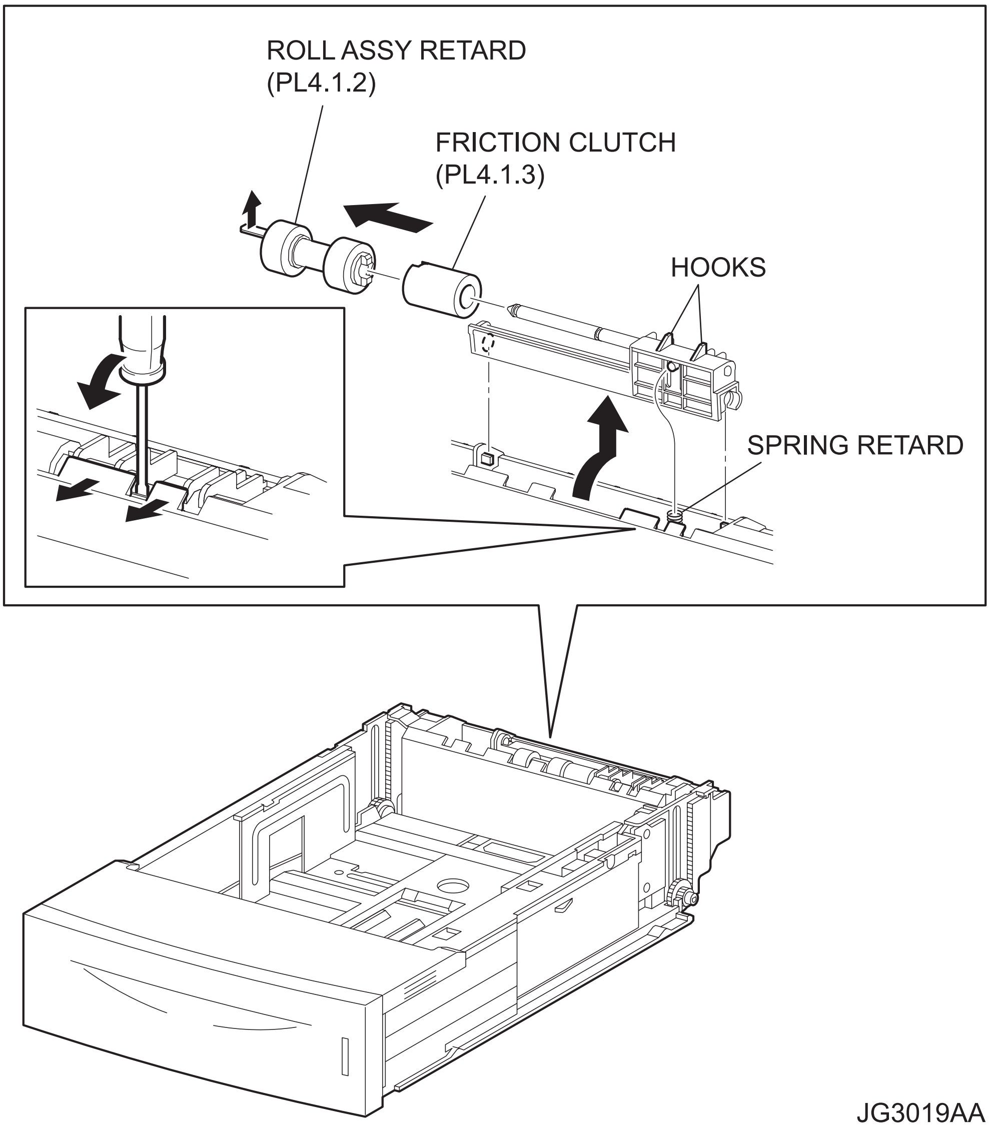
1) Remove the COVER CST (PL3.1.1) from the 250 PAPER CASSETTE.
2) Remove the 2 screws on the back side of the HANDLE EXTENSION 250 (PL3.1.33).
3) Rrelease the 5 hooks at the upper side and the 2 hooks at the lower side of the HANDLE EXTENSION 250 (PL3.1.33), then, remove the HANDLE EXTENSION 250 (PL3.1.33) from the HOUSING EXTENSION 250 (PL3.1.34).

Replacement

1) Put the 5 hooks on the upper side and 2 hooks on the lower side of the HANDLE EXTENSION 250 (PL3.1.33) to the HOUSING EXTENSION 250 (PL3.1.34).
2) Secure the HANDLE EXTENSION 250 (PL3.1.33) to the HANDLE EXTENSION 250 (PL3.1.34) using the 2 screws.
3) Install the COVER CST (PL3.1.1) to the 250 PAPER CASSETTE.

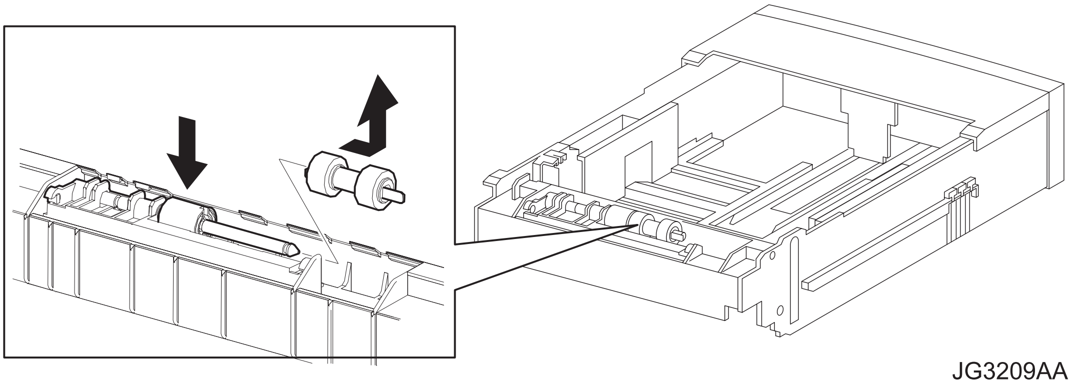
RRP4. 550 Paper Cassette

RRP4.1 ROLL ASSY RETARD (PL4.1.2)


ROLL ASSY RETARD
(PL4.1.2)
FRICTION CLUTCH
(PL4.1.3)
HOOKS
SPRING RETARD

JG3019AA

NOTE **Other than the procedure above, it is possible to remove the ROLL ASSY RETARD by pushing down the HOLDER RETARD.**



JG3209AA

Removal

1) Pull out the 550 PAPER CASSETTE from the printer.
2) Release the hooks securing the HOLDER RETARD (PL4.1.5) to the 550 PAPER CASSETTE using a screwdriver or the like.
3) Lift up the HOLDER RETARD in the direction of the arrow, and remove it.
4) Release the hook securing the ROLL ASSY RETARD, and pull it out from the SHAFT RETARD (PL4.1.4).

NOTE **When removing, do not hold the rubber rollers of the ROLL ASSY RETARD.**

NOTE **When removing HOLDER RETARD, be careful not to lose SPRING RETARD.**

Replacement

1) Install the ROLL ASSY RETARD to the SHFT RETARD (PL4.1.4), and secure the ROLL ASSY RETARD with the hook.

NOTE **When installing, do not hold the rubber rollers of the ROLL ASSY RETARD.**

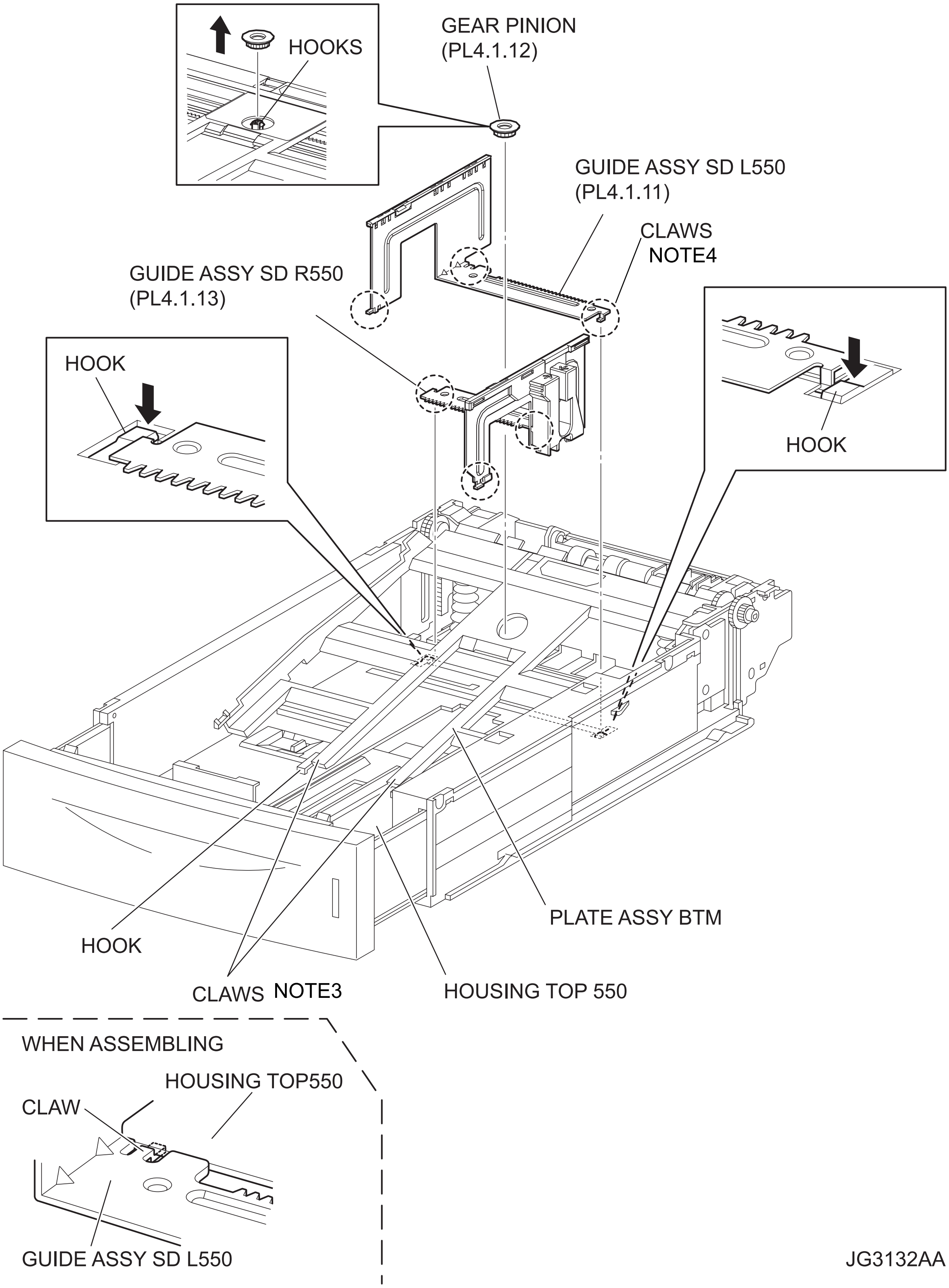
NOTE **Be sure to install the hook of the ROLL ASSY RETARD into the groove of the SHAFT RETARD.**

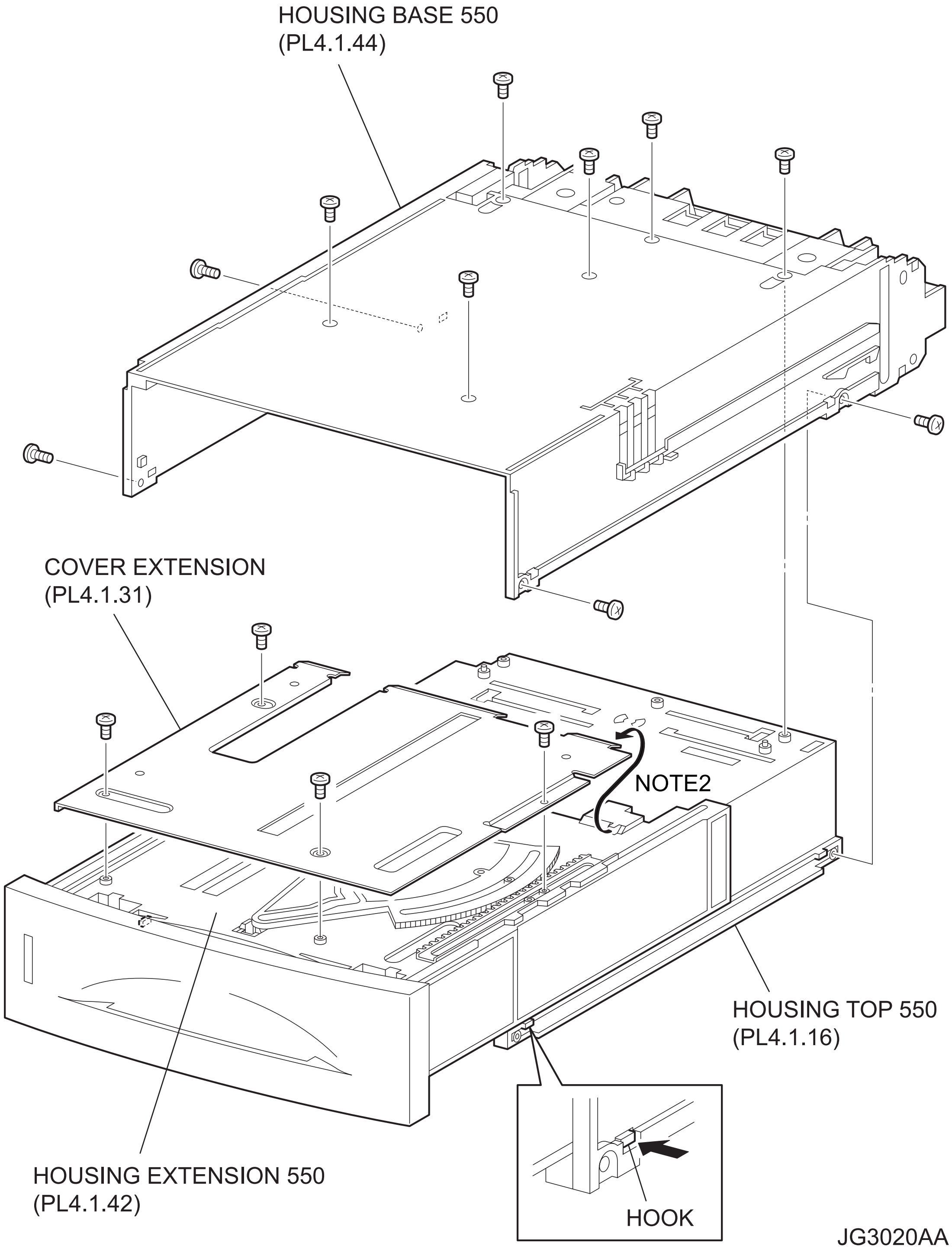
2) Move the HOLDER RETARD (PL4.1.5) in the opposite direction of the arrow, and install it to the 550 PAPER CASSETTE.

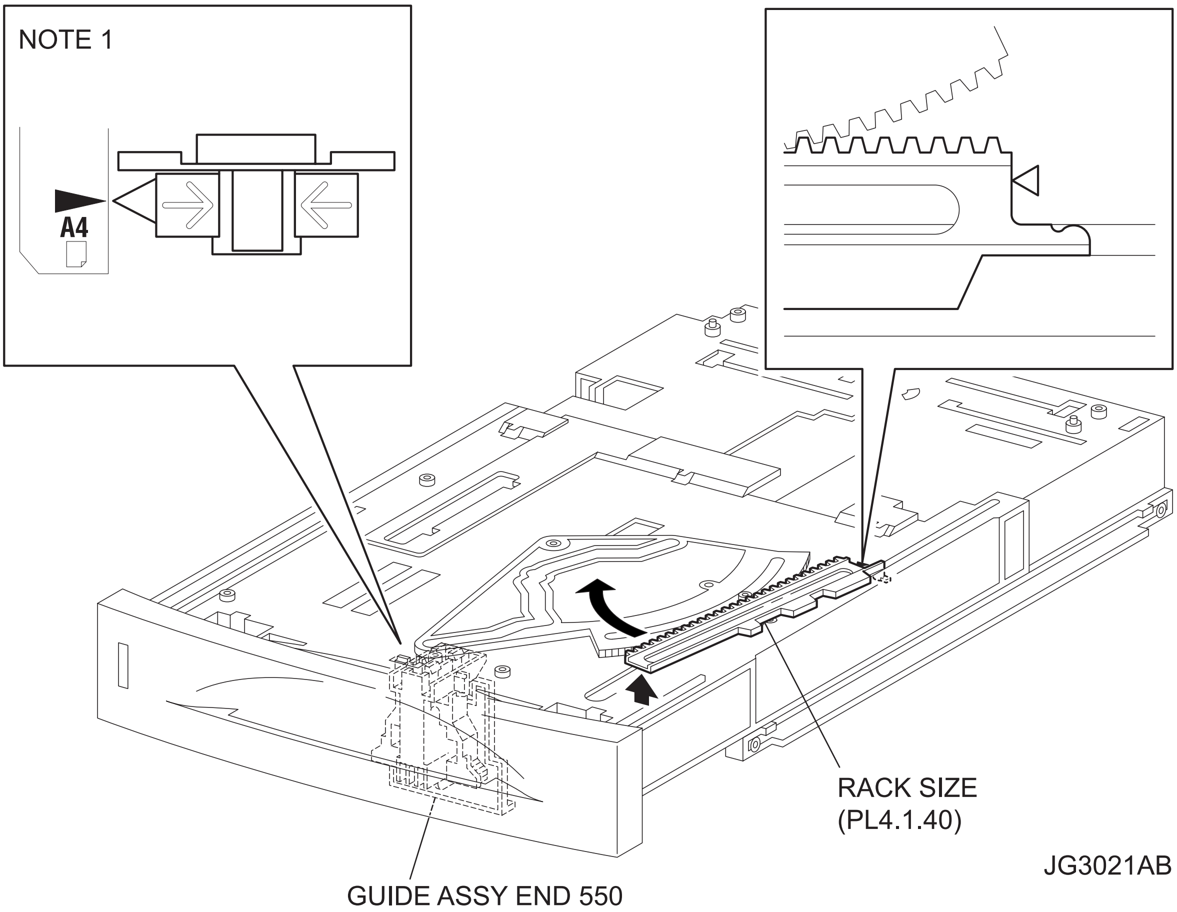
NOTE **After installing, make sure the HOLDER RETARD comes back to the former position with the spring force of the SPRING RETARD (PL4.1.6), when pushing down the HOLDER RETARD and then release the finger from it.**

3) Install the 550 PAPER CASSETTE to the printer.

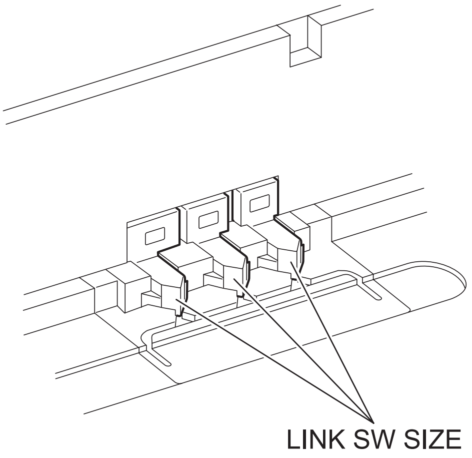
RRP4.2 RACK SIZE (PL4.1.40)


HOOKS
GEAR PINION
(PL4.1.12)
GUIDE ASSY SD L550
(PL4.1.11)
CLAWS
NOTE4
GUIDE ASSY SD R550
(PL4.1.13)
HOOK
HOOK
PLATE ASSY BTM
HOOK
CLAWS NOTE3
HOUSING TOP 550
WHEN ASSEMBLING
HOUSING TOP550
CLAW
GUIDE ASSY SD L550
JG3132AA


HOUSING BASE 550
(PL4.1.44)
COVER EXTENSION
(PL4.1.31)
NOTE2
HOUSING TOP 550
(PL4.1.16)
HOUSING EXTENSION 550
(PL4.1.42)
HOOK
JG3020AA


NOTE 1
A4
RACK SIZE
(PL4.1.40)
GUIDE ASSY END 550

JG3021AB


LINK SW SIZE

JG3200AA

Removal

1) Remove the COVER CST (PL4.1.1) from the 550 PAPER CASSETTE.
2) Release the lock of the LOCK EXTENSION, and draw out the cassette extension as far as it will go.
3) Release the hooks securing the GEAR PINION (PL4.1.12) to the HOUSING TOP 550 (PL4.1.16), and remove the GEAR PINION.
4) While pressing down the lock of the STOPPER GEAR (PL4.1.29), release the lock of the LEVER BTM LOCK (PL4.1.27) to lift up the PLATE ASSY BTM. (Figure 4.5)
5) Slide the GUIDE ASSY SD L550 (PL4.1.11) inward, and remove it from the HOUSING TOP 550 by pressing down the hook of the HOUSING TOP 550.
6) Slide the GUIDE ASSY SD R550 (PL4.1.13) inward, and remove it from the HOUSING TOP 550 by pressing down the hook of the HOUSING TOP 550.
7) Remove the 2 screws (gold tapping, 8mm) from both right and left sides, as well as the 6 screws (gold tapping, 8mm) on the back, that secure the HOUSING TOP 550 to the HOUSING BASE 550 (PL4.1.44).
8) Release the 4 hooks of the HOUSING TOP 550, and remove the HOUSING TOP 550 together with the HOUSING EXTENSION 550 (PL4.1.42), from the HOUSING BASE 550.
9) Remove the 4 screws (gold tapping, 6mm) securing the COVER EXTENSION (PL4.1.31) to the HOUSING EXTENSION 550.
10) Remove the COVER EXTENSION from the HOUSING EXTENSION 550.
11) Lift the front of the RACK SIZE (PL4.1.40) a little, and turn it in the direction of the arrow to remove it from the HOUSING EXTENSION 550.

Replacement

1) Put the hook of the top of the RACK SIZE into the groove of the HOUSING EXTENSION 550 (PL4.1.42), and turn it in the opposite direction of the arrow.
2) Align the end of the RACK SIZE wth the triangle mark printed on the HOUSING EXTENSION 550 as shown in the figure, and install the RACK SIZE to the HOUSING EXTENSION 550.

NOTE **When installing the RACK SIZE, be sure to draw out the GUIDE ASSY END 550 (PL4.1.43) as far as it will go.(NOTE1).**

NOTE **Use 6mm size of fixed screw. If 8mm size of screw is used, HOUSING EXTENSION 550 doesn't operate smoothly and LOCK EXTENSION 550 doesn't operate correctly.**

3) Install the COVER EXTENSION (PL4.1.31) to the HOUSING EXTENSION 550 using the 4 screws (gold tapping, 6mm).

NOTE **When installing, make sure the COVER EXTENSION is inserted under 3 claws of the HOUSING EXTENSION 550.(NOTE2).**

4) Install the HOUSING EXTENSION 550 and HOUSING TOP 550 (PL4.1.16) to the HOUSING BASE 550 while pushing the LINK SW SIZE1-550 (PL4.1.37), LINK SW SIZE2-550 (PL4.1.38) and LINK SW SIZE3-550 (PL4.1.39) of the HOUSING BASE 550 outward as shown in the figure.

NOTE **Be sure to put 2 claws that on the top of the PLATE ASSY BTM under the hooks on the HOUSING TOP 550.(NOTE3).**

5) After assembling the HOUSING TOP 550 to the HOUSING BASE 550 using the 4 hooks, secure them using the 2 screws (gold tapping, 8mm) on both right and left sides, as well as the 6 screws (gold tapping, 8mm) on the back.

NOTE **After tightening the screws, move the GUIDE ASSY END 550 back and forth, and make sure that the LINK SW SIZEs operate smoothly.**

6) Insert the link lever of the GUIDE INDICATOR1 (PL4.1.34) into the hole of the PLATE ASSY BTM. (Figure 4.8)
7) While pressing down the hook of the HOUSING TOP 550, install the GUIDE ASSY SD R550 (PL4.1.13) to the HOUSING TOP 550.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD R550 sit correctly in the grooves of the HOUSING TOP 550.(NOTE4).**

8) While pressing down the hook of the HOUSING TOP 550, install the GUIDE ASSY SD L550 (PL4.1.11) to the HOUSING TOP 550.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD L550 sit correctly in the grooves of the HOUSING TOP 550.(NOTE4).**

9) Push the PLATE ASSY BTM downward to lock.
10) With completely opened GUIDE ASSY SD L550 (PL4.1.11) and GUIDE ASSY SD R550 (PL4.1.13) to the both sides,install the GEAR PINION (PL4.1.12) to the HOUSING TOP 550.

NOTE **When installing the GEAR PINION, make sure the GUIDE ASSY SD R550 and GUIDE ASSY SD L550 are completely opened. If not, the side register may be misaligned.**

11) Install the COVER CST (PL4.1.1) to the 550 PAPER CASSETTE.

NOTE **After assembling, make sure that the LOW IND FRONT moves up-and-down in conjunction with the up-and-down movement of the PLATE ASSY BTM.**

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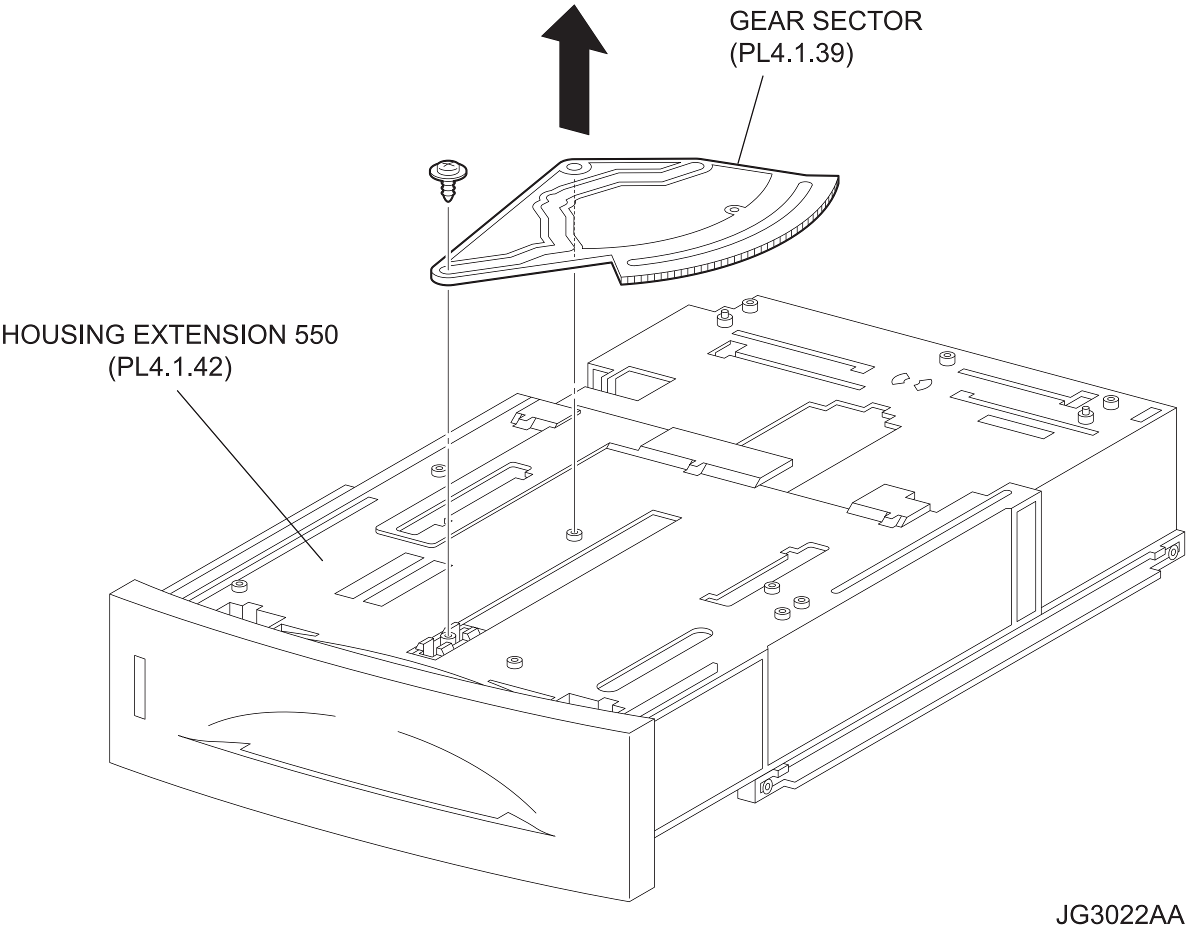
RRP4.3 GEAR SECTOR (PL4.1.39)


GEAR SECTOR
(PL4.1.39)
HOUSING EXTENSION 550
(PL4.1.42)
JG3022AA

Removal

1) Remove the COVER CST (PL4.1.1) from the 550 PAPER CASSETTE.
2) Release the lock of the LOCK EXTENSION, and draw out the cassette extension as far as it will go.
3) Release the hooks securing the GEAR PINION (PL4.1.12) to the HOUSING TOP 550 (PL4.1.16), and remove the GEAR PINION.
4) While pressing down the lock of the STOPPER GEAR (PL4.1.29), release the lock of the LEVER BTM LOCK (PL4.1.27) to lift up the PLATE ASSY BTM. (Figure 4.5)
5) Slide the GUIDE ASSY SD L550 (PL4.1.11) inward, and remove it from the HOUSING TOP 550 by pressing down the hook of the HOUSING TOP 550.
6) Slide the GUIDE ASSY SD R550 (PL4.1.13) inward, and remove it from the HOUSING TOP 550 by pressing down the hook of the HOUSING TOP 550.
7) Remove the 2 screws (gold tapping, 8mm) from both right and left sides, as well as the 6 screws (gold tapping, 8mm) on the back, that secure the HOUSING TOP 550 to the HOUSING BASE 550 (PL4.1.44).
8) Release the 4 hooks of the HOUSING TOP 550, and remove the HOUSING TOP 550 together with the HOUSING EXTENSION 550 (PL4.1.42) from the HOUSING BASE 550.
9) Remove the 4 screws (gold tapping, 6mm) securing the COVER EXTENSION (PL4.1.31) to the HOUSING EXTENSION 550.
10) Remove the COVER EXTENSION from the HOUSING EXTENSION 550.
11) Remove the RACK SIZE (PL4.1.40). (RRP4.2)
12) Remove the screw (black with flange, 8mm) securing the GEAR SECTOR.
13) Remove the GEAR SECTOR from the HOUSING EXTENSION 550 (PL4.1.42).

Replacement

1) Install the GEAR SECTOR to the HOUSING EXTENSION 550 (PL4.1.42).
2) Secure the GEAR SECTOR using the screw (black with flange, 8mm).
3) Install the RACK SIZE (PL4.1.40). (RRP4.2)
4) Install the COVER EXTENSION (PL4.1.31) to the HOUSING EXTENSION 550 using the 4 screws (gold tapping, 6mm).

NOTE **When installing, make sure the COVER EXTENSION is inserted under 3 claws of the HOUSING EXTENSION 550.**

5) Install the HOUSING EXTENSION 550 and HOUSING TOP 550 (PL4.1.16) to the HOUSING BASE 550 while pushing the LINK SW SIZE1-550 (PL4.1.37), LINK SW SIZE2-550 (PL4.1.38) and LINK SW SIZE3-550 (PL4.1.39) of the HOUSING BASE 550 outward as shown in the figure. (Figure 4.2)

NOTE **Be sure to put 2 claws that on the top of the PLATE ASSY BTM under the hooks on the HOUSING TOP 550.**

NOTE **Use 6mm size of fixed screw. If 8mm size of screw is used, HOUSING EXTENSION 550 doesn't operate smoothly and LOCK EXTENSION 550 doesn't operate correctly.**

6) After assembling the HOUSING TOP 550 to the HOUSING BASE 550 using the 4 hooks, secure them using the 2 screws (gold tapping, 8mm) on both right and left sides, as well as the 6 screws (gold tapping, 8mm) on the back.

NOTE **After tightening the screws, move the GUIDE ASSY END 550 back and forth, and make sure that the LINK SW SIZEs operate smoothly.**

7) Insert the link lever of the GUIDE INDICATOR1 (PL4.1.34) into the hole of the PLATE ASSY BTM. (Figure 4.8)
8) While pressing down the hook of the HOUSING TOP 550, install the GUIDE ASSY SD R550 (PL4.1.13) to the HOUSING TOP 550.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD R550 sit correctly in the grooves of the HOUSING TOP 550.**

9) While pressing down the hook of the HOUSING TOP 550, install the GUIDE ASSY SD L550 (PL4.1.11) to the HOUSING TOP 550.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD L550 sit correctly in the grooves of the HOUSING TOP 550.**

10) Push the PLATE ASSY BTM downward to lock.
11) With completely opened GUIDE ASSY SD L550 (PL4.1.11) and GUIDE ASSY SD R550 (PL4.1.13) to the both sides, install the GEAR PINION (PL4.1.12) to the HOUSING TOP 550.

NOTE **When installing the GEAR PINION, make sure the GUIDE ASSY SD R550 and GUIDE ASSY SD L550 are completely opened. If not, the side register may be misaligned.**

12) Install the COVER CST (PL4.1.1) to the 550 PAPER CASSETTE.

NOTE **After assembling, make sure that the LOW IND FRONT moves up-and-down in conjunction with the up-and-down movement of the PLATE ASSY BTM.**

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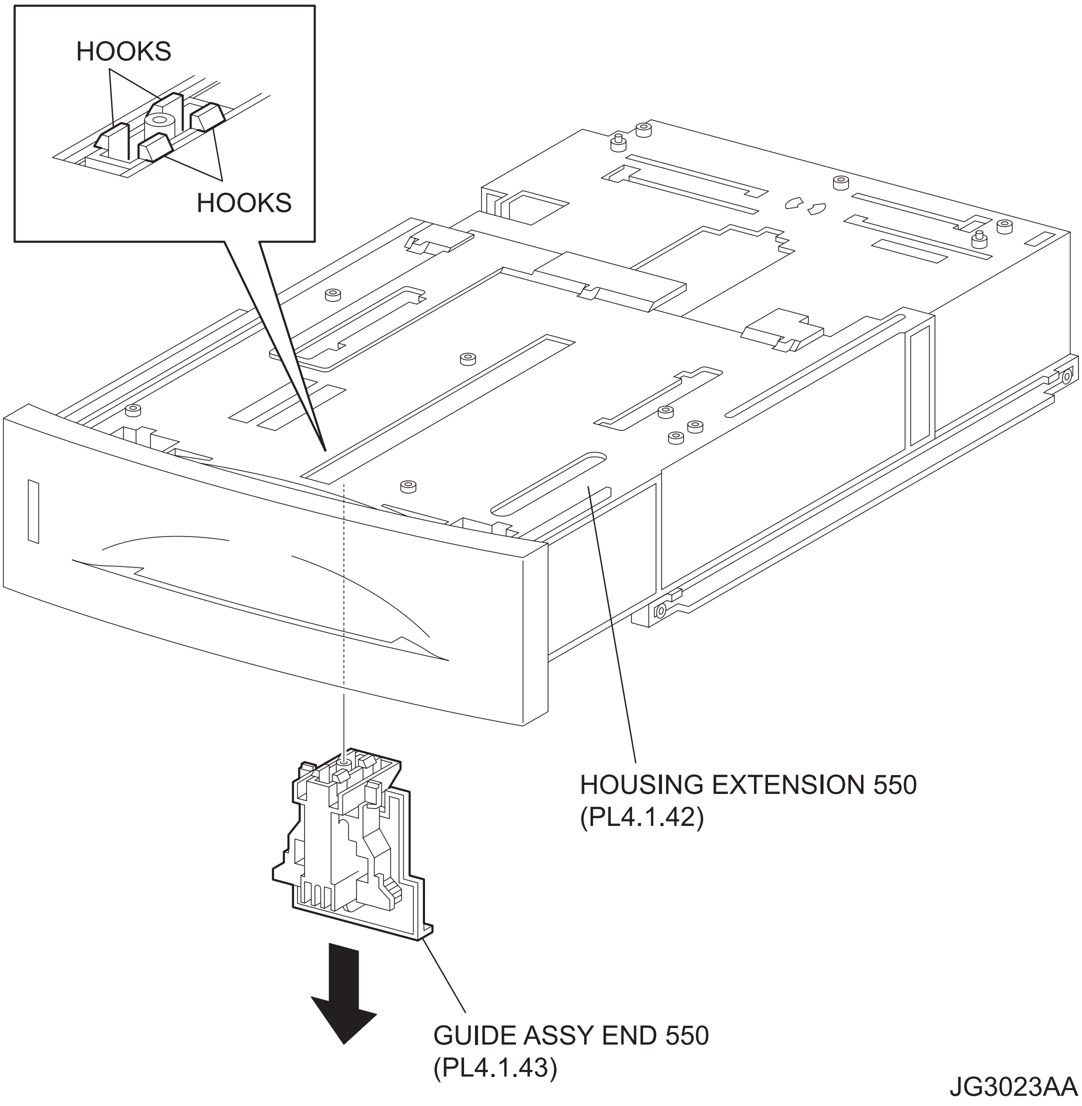
RRP4.4 GUIDE ASSY END 550 (PL4.1.43)


HOOKS
HOOKS
HOUSING EXTENSION 550
(PL4.1.42)
GUIDE ASSY END 550
(PL4.1.43)
JG3023AA

Removal

1) Remove the COVER CST (PL4.1.1) from the 550 PAPER CASSETTE.
2) Release the lock of the LOCK EXTENSION, and draw out the cassette extension as far as it will go.
3) Release the hooks securing the GEAR PINION (PL4.1.12) to the HOUSING TOP 550 (PL4.1.16), and remove the GEAR PINION.
4) While pressing down the lock of the STOPPER GEAR (PL4.1.29), release the lock of the LEVER BTM LOCK (PL4.1.27) to lift up the PLATE ASSY BTM. (Figure 4.5)
5) Slide the GUIDE ASSY SD L550 (PL4.1.11) inward, and remove it from the HOUSING TOP 550 by pressing down the hook of the HOUSING TOP 550.
6) Slide the GUIDE ASSY SD R550 (PL4.1.13) inward, and remove it from the HOUSING TOP 550 by pressing down the hook of the HOUSING TOP 550.
7) Remove the 2 screws (gold tapping, 8mm) from both right and left sides, as well as the 6 screws (gold tapping, 8mm) on the back, that secure the HOUSING TOP 550 to the HOUSING BASE 550 (PL4.1.44).
8) Release the 4 hooks of the HOUSING TOP 550, and remove the HOUSING TOP 550 together with the HOUSING EXTENSION 550 (PL4.1.42) from the HOUSING BASE 550.
9) Remove the 4 screws (gold tapping, 6mm) securing the COVER EXTENSION (PL4.1.31) to the HOUSING EXTENSION 550.
10) Remove the COVER EXTENSION from the HOUSING EXTENSION 550.
11) Remove the RACK SIZE (PL4.1.40). (RRP4.2)
12) Remove the GEAR SECTOR (PL4.1.39) (RRP4.3)
13) Release the hooks securing the GUIDE ASSY END 550 to the HOUSING EXTENSION 550 (PL4.1.42).

NOTE **Be careful handling the hooks of the GUIDE ASSY END 550. They are fragile and could break if given excessive force.**

14) Remove the GUIDE ASSY END 550 from the HOUSING EXTENSION 550.

Replacement

1) Secure the GUIDE ASSY END 550 to the HOUSING EXTENSION 550 (PL4.1.42) using the 4 hooks.
2) Install the GEAR SECTOR (PL4.1.39). (RRP4.3)
3) Install the RACK SIZE (PL4.1.40). (RRP4.2)
4) Install the COVER EXTENSION (PL4.1.31) to the HOUSING EXTENSION 550 using the 4 screws (gold tapping, 6mm).

NOTE **When installing, make sure the COVER EXTENSION is inserted under 3 claws of the HOUSING EXTENSION 550.**

NOTE **Use 6mm size of fixed screw. If 8mm size of screw is used, HOUSING EXTENSION 550 doesn't operate smoothly and LOCK EXTENSION 550 doesn't operate correctly.**

5) Install the HOUSING EXTENSION 550 and HOUSING TOP 550 (PL4.1.16) to the HOUSING BASE 550 while pushing the LINK SW SIZE1-550 (PL4.1.37), LINK SW SIZE2-550 (PL4.1.38) and LINK SW SIZE3-550 (PL4.1.39) of the HOUSING BASE 550 outward as shown in the figure. (Figure 4.2)

NOTE **Be sure to put 2 claws that on the top of the PLATE ASSY BTM under the hooks on the HOUSING TOP 550.**

6) After assembling the HOUSING TOP 550 to the HOUSING BASE 550 using the 4 hooks, secure them using the 2 screws (gold tapping, 8mm) on both right and left sides, as well as the 6 screws (gold tapping, 8mm) on the back.

NOTE **After tightening the screws, move the GUIDE ASSY END 550 back and forth, and make sure that the LINK SW SIZEs operate smoothly.**

7) Insert the link lever of the GUIDE INDICATOR1 (PL4.1.34) into the hole of the PLATE ASSY BTM. (Figure 4.8)
8) While pressing down the hook of the HOUSING TOP 550, install the GUIDE ASSY SD R550 (PL4.1.13) to the HOUSING TOP 550.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD R550 sit correctly in the grooves of the HOUSING TOP 550.**

9) While pressing down the hook of the HOUSING TOP 550, install the GUIDE ASSY SD L550 (PL4.1.11) to the HOUSING TOP 550.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD L550 sit correctly in the grooves of the HOUSING TOP 550.**

10) Push the PLATE ASSY BTM downward to lock.
11) With completely opened GUIDE ASSY SD L550 (PL4.1.11) and GUIDE ASSY SD R550 (PL4.1.13) to the both sides,install the GEAR PINION (PL4.1.12) to the HOUSING TOP 550.

NOTE **When installing the GEAR PINION, make sure the GUIDE ASSY SD R550 and GUIDE ASSY SD L550 are completely opened. If not, the side register may be misaligned.**

12) Install the COVER CST (PL4.1.1) to the 550 PAPER CASSETTE.

NOTE **After assembling, make sure that the LOW IND FRONT moves up-and-down in conjunction with the up-and-down movement of the PLATE ASSY BTM.**

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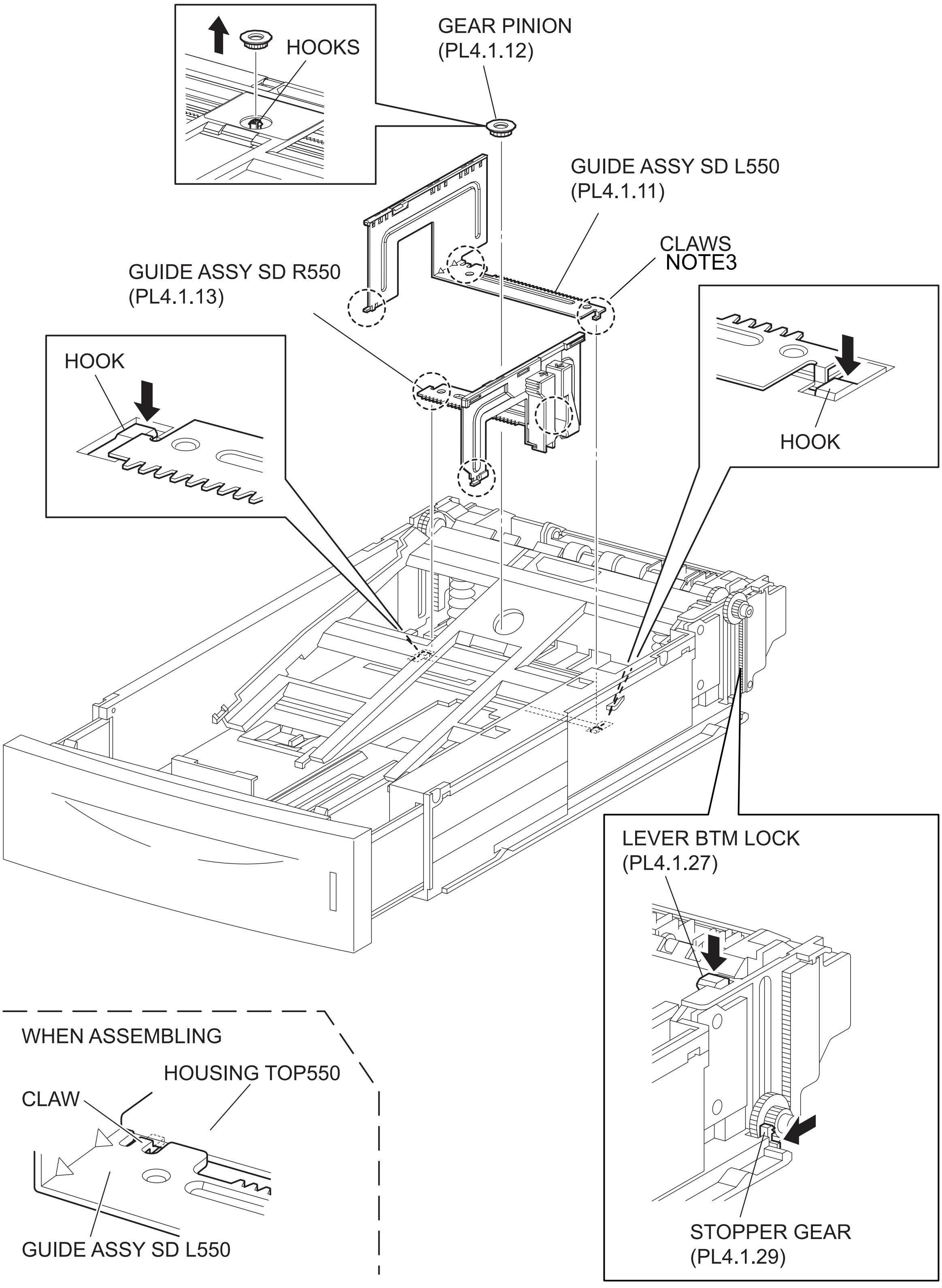
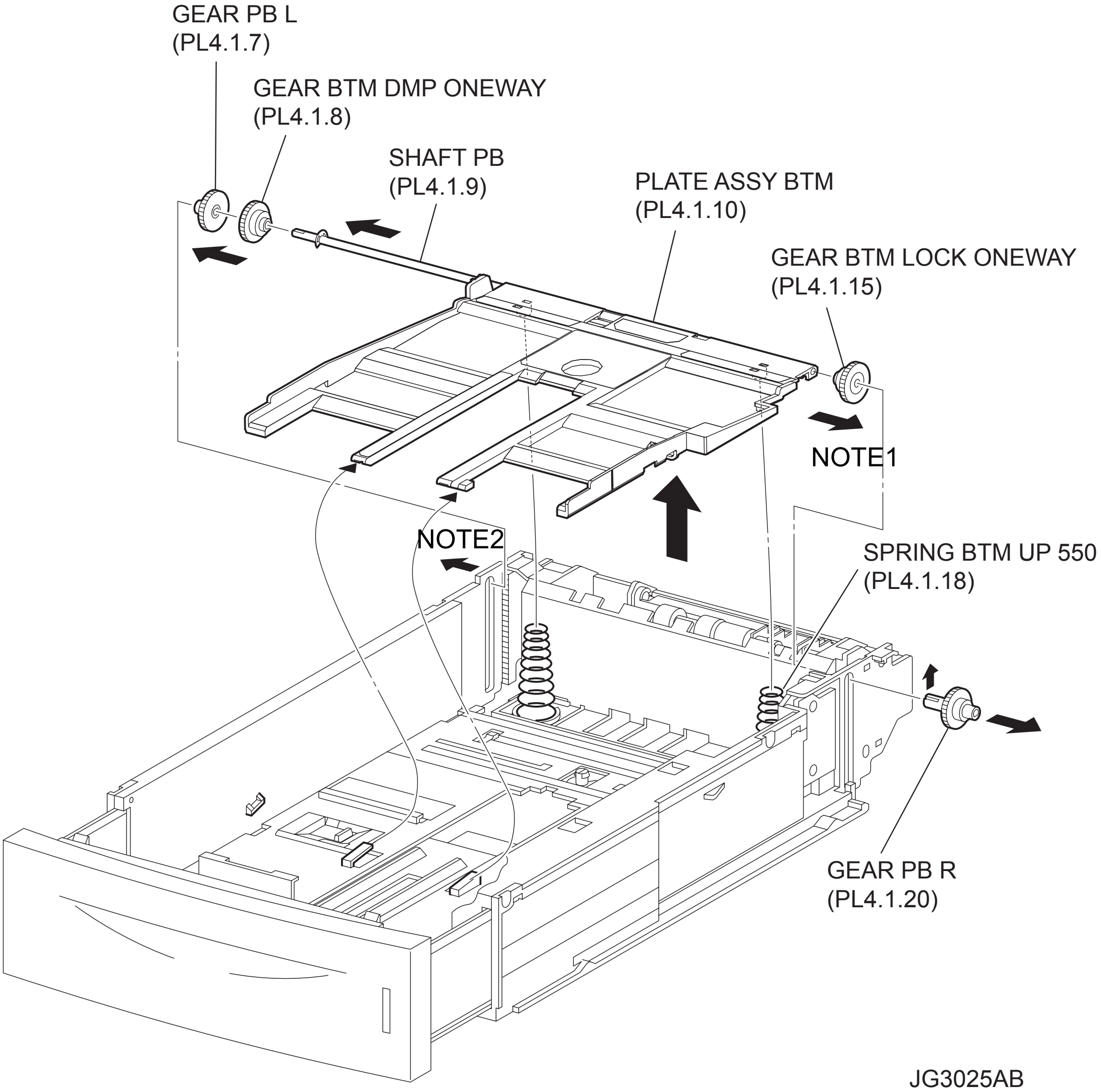
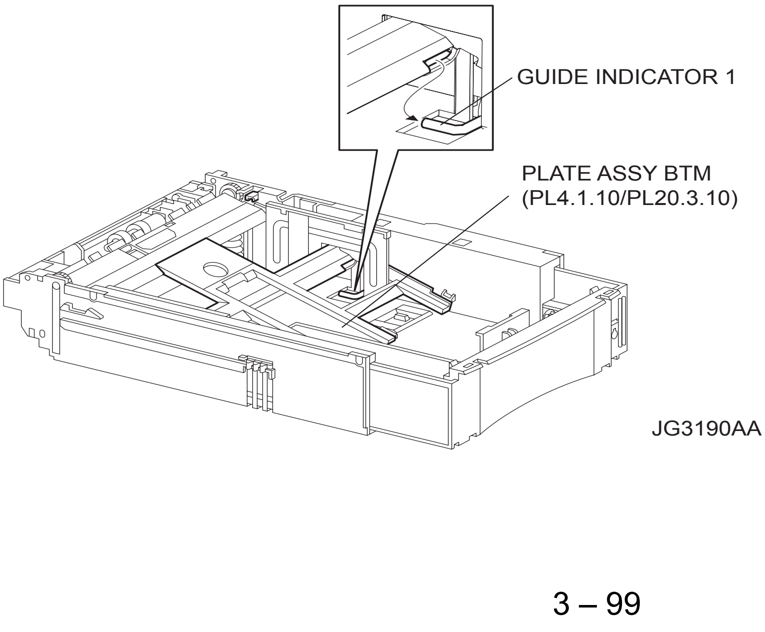
RRP4.5   PLATE ASSY BTM (PL4.1.10)


HOOKS
GEAR PINION
(PL4.1.12)
GUIDE ASSY SD L550
(PL4.1.11)
CLAWS
NOTE3
GUIDE ASSY SD R550
(PL4.1.13)
HOOK
HOOK
LEVER BTM LOCK
(PL4.1.27)
STOPPER GEAR
(PL4.1.29)
WHEN ASSEMBLING
HOUSING TOP550
CLAW
GUIDE ASSY SD L550

JG3024AA


GEAR PB L
(PL4.1.7)
GEAR BTM DMP ONEWAY
(PL4.1.8)
SHAFT PB
(PL4.1.9)
PLATE ASSY BTM
(PL4.1.10)
GEAR BTM LOCK ONEWAY
(PL4.1.15)
NOTE1
NOTE2
SPRING BTM UP 550
(PL4.1.18)
GEAR PB R
(PL4.1.20)

JG3025AB


GUIDE INDICATOR 1
PLATE ASSY BTM
(PL4.1.10/PL20.3.10)

JG3190AA

Removal

1) Remove the COVER CST (PL4.1.1) from the 550 PAPER CASSETTE.
2) Release the lock of the LOCK EXTENSION, and draw out the cassette extension as far as it will go.
3) Release the hooks securing the GEAR PINION (PL4.1.12) to the HOUSING TOP 550 (PL4.1.16), and remove the GEAR PINION.
4) While pressing down the lock of the STOPPER GEAR (PL4.1.29), release the lock of the LEVER BTM LOCK (PL4.1.27) to lift up the PLATE ASSY BTM.
5) Slide the GUIDE ASSY SD L550 (PL4.1.11) inward, and remove it from the HOUSING TOP 550 by pressing down the hook of the HOUSING TOP 550.
6) Slide the GUIDE ASSY SD R550 (PL4.1.13) inward, and remove it from the HOUSING TOP 550 by pressing down the hook of the HOUSING TOP 550.

NOTE **In the following steps, the GEAR PB L (PL4.1.7), GEAR BTM DMP ONEWAY (PL4.1.8) and GEAR BTM LOCK ONEWAY (PL4.1.15) will be detached. Be careful not to lose these gears.**

7) Release the hook of the GEAR PB R (PL4.1.20), and remove the GEAR PB R from the SHAFT PB (PL4.1.9).

NOTE **It is hard to remove GEAR PB R. When removing it, be careful not to break it.**

8) Disengage the GEAR PB L from the PLATE GEAR LOCK 550 while bending the HOUSING BASE 550 in the direction of the arrows. Remove the PLATE ASSY BTM together with the SHAFT PB, GEAR PB L, GEAR BTM DMP ONEWAY, and GEAR BTM LOCK ONEWAY from the HOUSING TOP 550.
9) Pull out the SHAFT PB from the PLATE ASSY BTM, and remove the GEAR PB L, GEAR BTM DMP ONEWAY and GEAR BTM LOCK ONEWAY.

Replacement

1) Insert the SHAFT PB (PL4.1.9) into the PLATE ASSY BTM, and insert the GEAR BTM DMP ONE-WAY, GEAR PB L and GEAR BTM LOCK ONEWAY to the SHAFT PB.
2) While disengaging the GEAR PB L, install the assembled PLATE ASSY BTM to the HOUSING TOP 550 (PL4.1.16).

NOTE **When installing the PLATE ASSY BTM, be sure to put 2 SPRING BTM UP 550s (PL4.1.18) into the bosses on the back of the PLATE ASSY BTM.(NOTE1).**

NOTE **Be sure to put 2 claws that on the top of the PLATE ASSY BTM under the hooks on the HOUSING TOP 550.(NOTE2).**

3) Insert the link lever of the GUIDE INDICATOR1 (PL4.1.34) into the hole of the PLATE ASSY BTM. (Figure 4.8)
4) Install the GEAR PB R (PL4.1.20) to the SHAFT PB (PL4.1.9), and secure it with the hook.

NOTE **Be sure to install the hook of the GEAR PB R into the groove of the SHAFT PB.**

NOTE **When installing the PLATE GEAR LOCK 550, be sure to lift up the PLATE ASSY BTM. If the PLATE ASSY BTM is inclined, a paper skew or jam may occur. Check after the installation is completed.**

5) While pressing down the hook of the HOUSING TOP 550, install the GUIDE ASSY SD R550 (PL4.1.13) to the HOUSING TOP 550.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD R550 sit correctly in the grooves of the HOUSING TOP 550.(NOTE3).**

6) While pressing down the hook of the HOUSING TOP 550, install the GUIDE ASSY SD L550 (PL4.1.11) to the HOUSING TOP 550.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD L550 sit correctly in the grooves of the HOUSING TOP 550.**

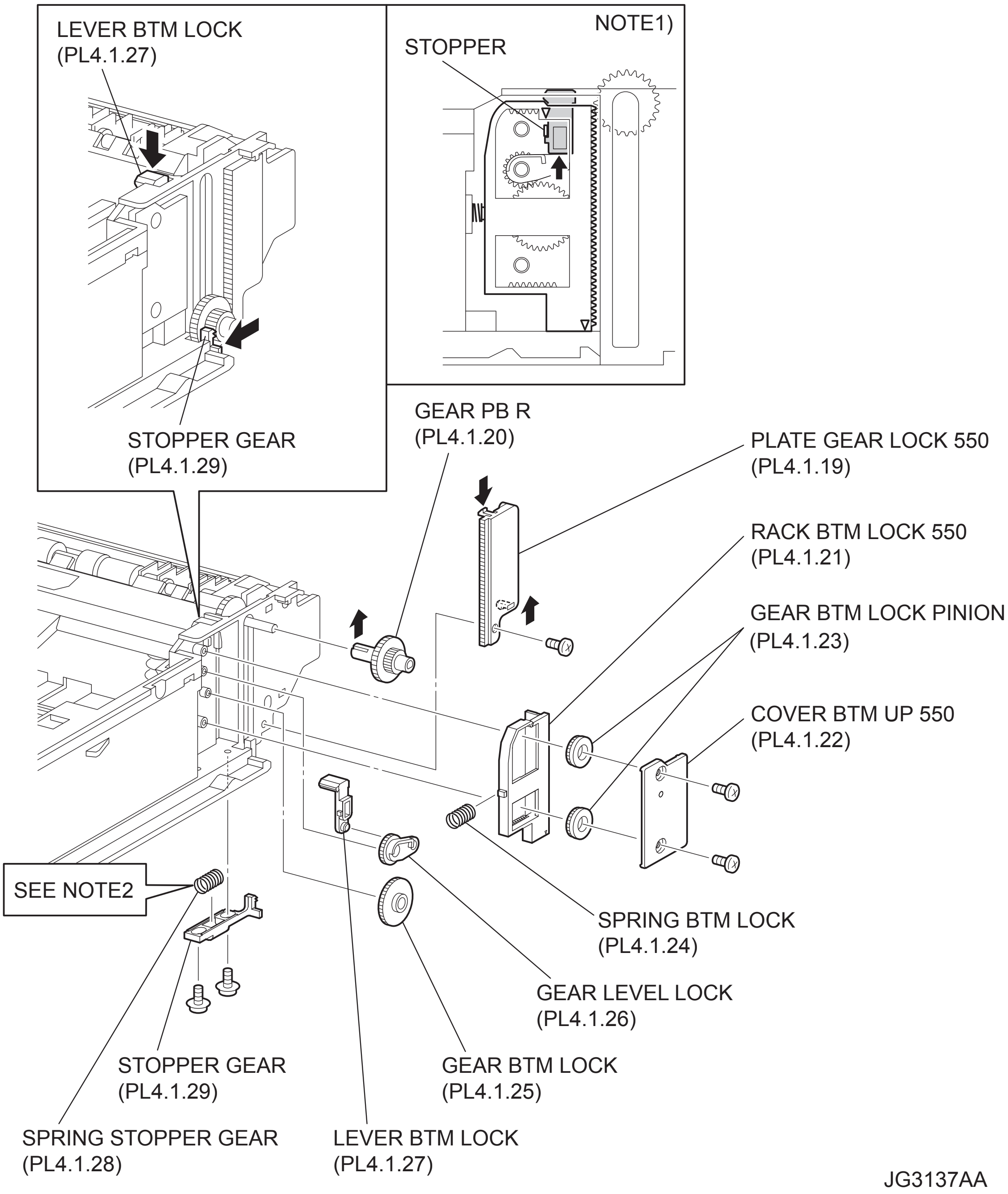
7) Push the PLATE ASSY BTM downward to lock.
8) Install the GEAR PINION (PL4.1.12) to the HOUSING TOP 550.

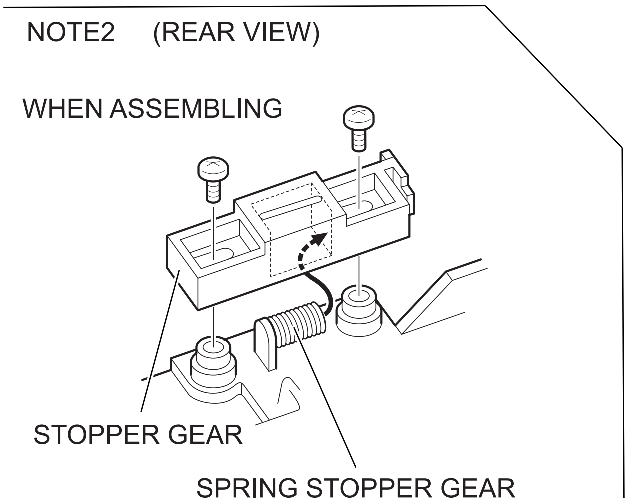
NOTE **When installing the GEAR PINION, make sure the GUIDE ASSY SD R550 and GUIDE ASSY SD L550 are completely opened. If not, the side register may be misaligned.**

9) Install the COVER CST (PL4.1.1) to the 550 PAPER CASSETTE.

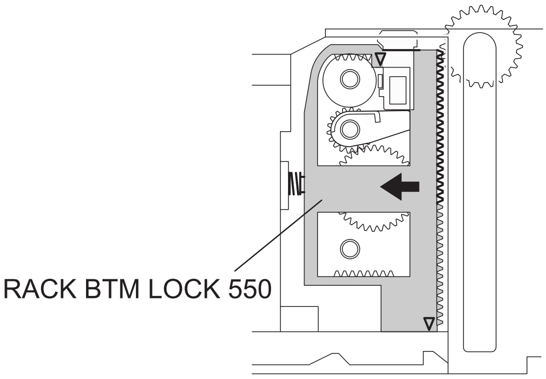
NOTE **After assembling, make sure that the LOW IND FRONT moves up-and-down in conjunction with the up-and-down movement of the PLATE ASSY BTM.**

RRP4.6 GEAR LEVER LOCK (PL4.1.26), LEVER BTM LOCK (PL4.1.27)

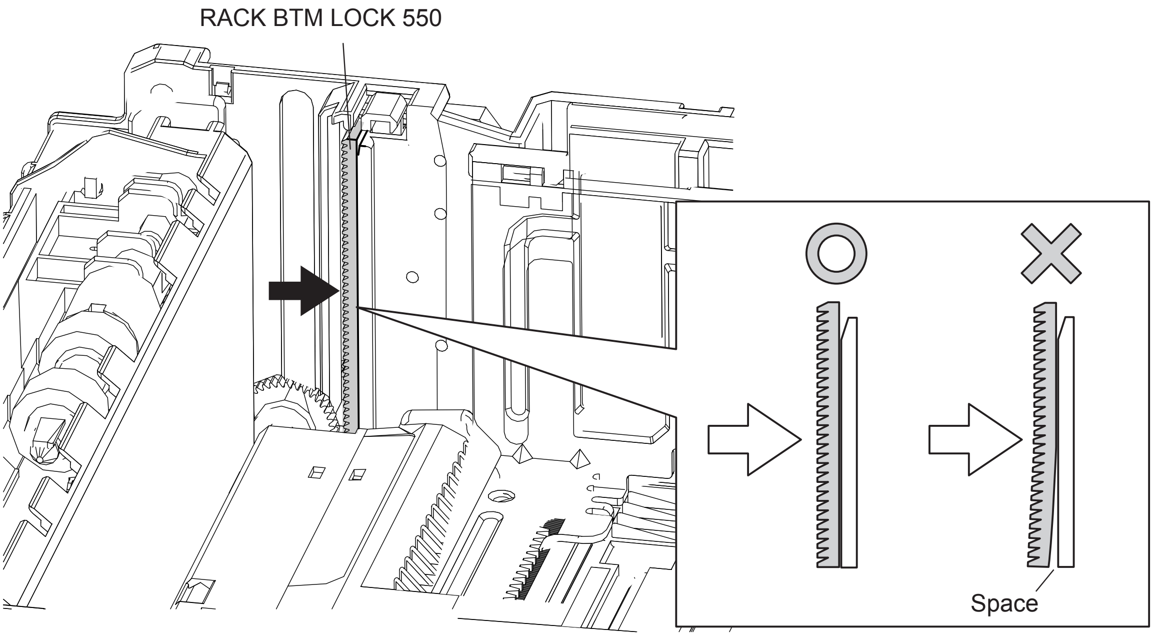

LEVER BTM LOCK
(PL4.1.27)
NOTE1)
STOPPER
STOPPER GEAR
(PL4.1.29)
GEAR PB R
(PL4.1.20)
PLATE GEAR LOCK 550
(PL4.1.19)
RACK BTM LOCK 550
(PL4.1.21)
GEAR BTM LOCK PINION
(PL4.1.23)
COVER BTM UP 550
(PL4.1.22)
SEE NOTE2
SPRING BTM LOCK
(PL4.1.24)
GEAR LEVEL LOCK
(PL4.1.26)
STOPPER GEAR
(PL4.1.29)
GEAR BTM LOCK
(PL4.1.25)
SPRING STOPPER GEAR
(PL4.1.28)
LEVER BTM LOCK
(PL4.1.27)
JG3137AA


NOTE2 (REAR VIEW)
WHEN ASSEMBLING
STOPPER GEAR
SPRING STOPPER GEAR

JG3183AA


RACK BTM LOCK 550

JG3542AA


RACK BTM LOCK 550
○
✕
Space

JG3544AA

Removal

1) Remove the COVER CST (PL4.1.1) from the 550 PAPER CASSETTE.
2) Release the lock of the LOCK EXTENSION, and draw out the cassette extension as far as it will go.
3) While pressing down the lock of the STOPPER GEAR (PL4.1.29), release the lock of LEVER BTM LOCK (PL4.1.27) to lift up the PLATE ASSY BTM (PL4.1.10).
4) Remove the screw (gold tapping, 8mm) securing the PLATE GEAR LOCK 550 (PL4.1.19) at the GEAR PB R (PL4.1.20) side.
5) Release the hook of the PLATE GEAR LOCK 550, and remove it from the HOUSING BASE 550 (PL4.1.44).
6) Release the hook of the GEAR PB R, and remove the GEAR PB R from the SHAFT PB (PL4.1.9).
7) Remove the 2 screws (gold tapping, 6mm) securing the COVER BTM UP 550 (PL4.1.22), and remove it from the HOUSING BASE 550.
8) Remove 2 GEAR LOCK PINIONs (PL4.1.23) from the HOUSING BASE 550.
9) Remove the RACK BTM LOCK 550 (PL4.1.21) together with the SPRING BTM LOCK (PL4.1.24) from the HOUSING BASE 550.
10) Remove the GEAR BTM LOCK (PL 4.1.25) from the HOUSING BASE 550.
11) Remove the GEAR LEVER LOCK from the HOUSING BASE 550.
12) Remove the 2 screws (gold tapping, 6mm) securing the STOPPER GEAR (PL4.1.29), and remove the STOPPER GEAR and SPRING STOPPER GEAR (PL4.1.28) from the HOUSING BASE 550.

NOTE **When removing the STOPPER GEAR, be careful not to lose the SPRING STOPPER GEAR.**

Replacement

NOTE **When installing, be sure to lift up the PLATE ASSY BTM. If the PLATE ASSY BTM is inclined, a paper skew or jam may occur. Check after the installation is completed.**

1) Put the SPRING STOPPER GEAR (PL4.1.28) into the STOPPER GEAR (PL4.1.29), and secure the STOPPER GEAR to the HOUSING BASE 550 (PL4.1.44) using the 2 screws (gold tapping, 6mm).

NOTE **When installing the STOPPER GEAR, be careful not to lose the SPRING STOPPER GEAR.**

NOTE **Install the STOPPER GEAR so that one end of the SPRING STOPPER GEAR is in contact with the plate located on the back of the HOUSING BASE 550 as shown in the figure. (Refer to NOTE 2.)**

2) Install the GEAR LEVER LOCK to the HOUSING BASE 550.
3) Install the GEAR BTM LOCK (PL4.1.25) to the HOUSING BASE 550.
4) Install the SPRING BTM LOCK (PL4.1.24) to the projection of the RACK BTM LOCK 550 (PL4.1.21), and install them to the HOUSING BASE 550.

NOTE **When installing the RACK BTM LOCK 550, be sure to install it with the LEVER BTM LOCK lifted up. After installing, push down the LEVER BTM LOCK and then release the finger from it, check that the projection of the LEVER BTM LOCK is hit the stopper of the HOUSING BASE 550 and the triangle mark is placed above the stopper.**

5) Install 2 GEAR LOCK PINIONs (PL4.1.23) to the HOUSING BASE 550, and engage the gear.

NOTE **Install the lower GEAR BTM PINION after installing the upper GEAR BTM LOCK PINION. When installing the lower GEAR BTM PINION, press RACK BTM LOCK 550 in the direction of arrow until it bumps into the edge. (NOTE3)**

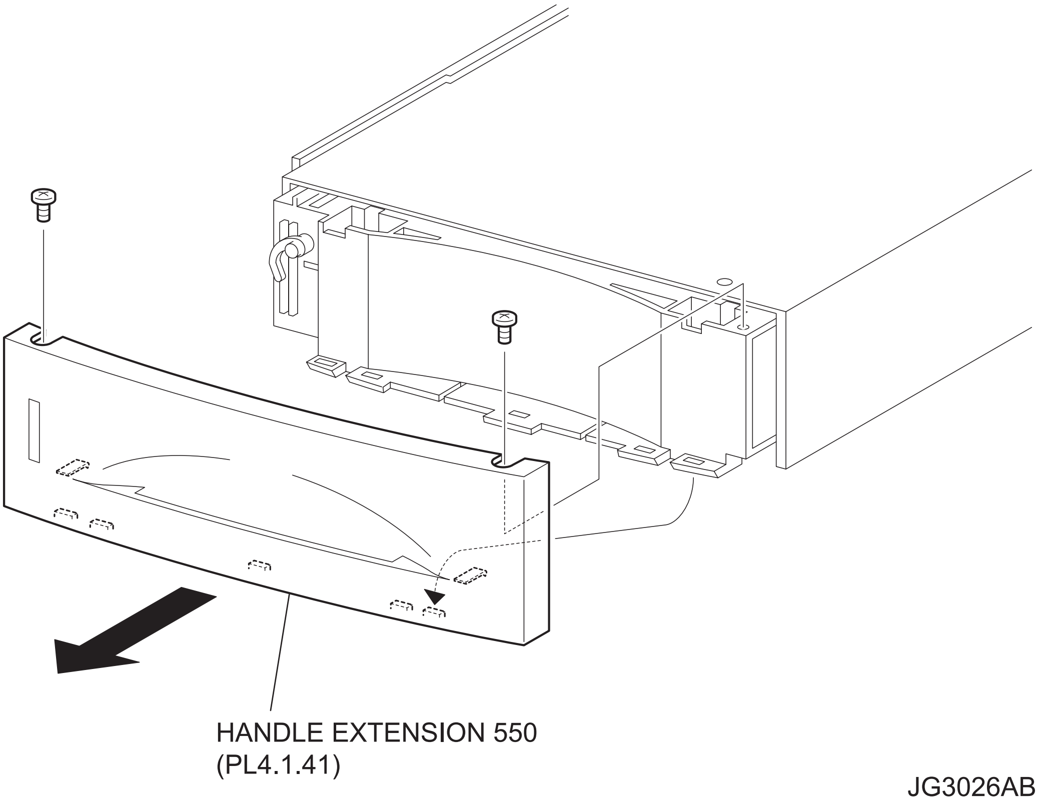
6) Secure the COVER BTM UP 550 (PL4.1.22) to the HOUSING BASE 550 using the screw (gold tapping, 6mm).
7) Install the GEAR PB R (PL4.1.20) to the SHAFT PB (PL4.1.9), and secure it with the hook.

NOTE **Be sure to install the hook of the GEAR PB R into the groove of the SHAFT PB.**

8) Install the PLATE GEAR LOCK 550 (PL4.1.19) to the HOUSING BASE 550, and secure it with the hook.
9) Secure the PLATE GEAR LOCK 550 using the screw (gold tapping, 8mm).
10) Push the PLATE ASSY BTM (PL4.1.10) downward to lock.

NOTE **Confirm that there is no space between RACK BTM LOCK 550 and HOUSING BASE 550 when pressing the center of RACK BTM LOCK 550 against HOUSING BASE 550.**

RRP4.7   HANDLE EXTENSION 550 (PL4.1.41)


HANDLE EXTENSION 550
(PL4.1.41)
JG3026AB

Removal

1) Remove the COVER CST (PL4.1.1) from the 550 PAPER CASSETTE.
2) Remove the 2 screws on the back side of the HANDLE EXTENSION 550.
3) Rrelease the 5 hooks at the upper side and 2 hooks at the lower side of the HANDLE EXTENSION 550, then, remove the HANDLE EXTENSION 550 from the HOUSING EXTENSION 550 (PL4.1.42).

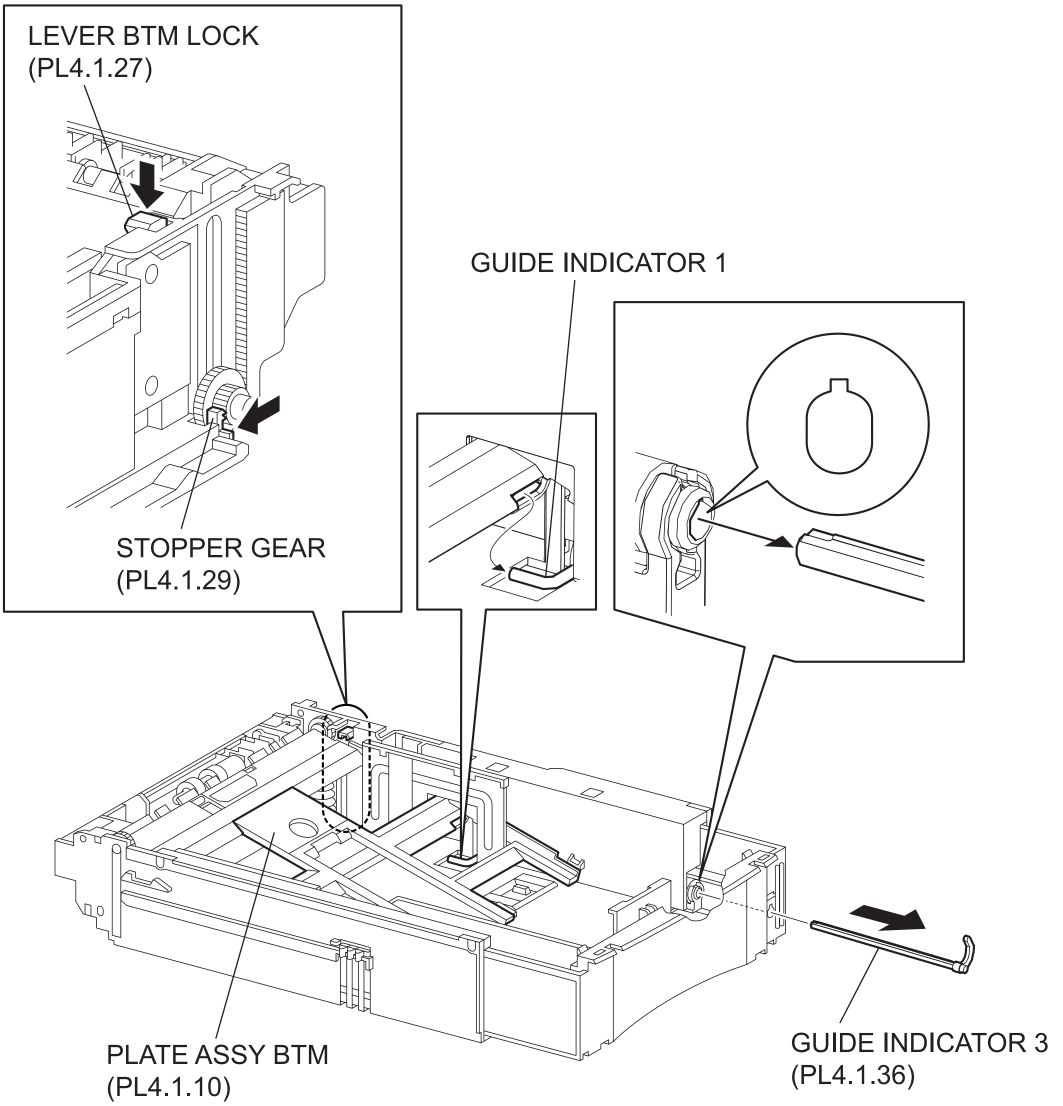
NOTE **When removing the HANDLE EXTENSION 550, the LOW INDICATOR (PL4.1.37) and LOW IND FRONT (PL4.1.38) will be detached. Be careful not to lose them.**

Replacement

1) Install the LOW INDICATOR (PL4.1.37) and LOW IND FRONT (PL4.1.38). (RRP4.10)
2) Put the 5 hooks on the top portion and 2 hooks on the lower sideof the HANDLE EXTENSION 550 to the HOUSING EXTENSION 550 (PL4.1.42).
3) Secure the HANDLE EXTENSION 550 (PL4.1.41) to the HOUSING EXTENSION 550 using the 2 screws.
4) Install the COVER CST (PL4.1.1) to the 550 PAPER CASSETTE.

NOTE **After assembling, make sure that the LOW IND FRONT moves up-and-down in conjunction with the up-and-down movement of the PLATE ASSY BTM.**

RRP4.8 GUIDE INDICATOR 3 (PL4.1.36)


LEVER BTM LOCK
(PL4.1.27)
STOPPER GEAR
(PL4.1.29)
GUIDE INDICATOR 1
PLATE ASSY BTM
(PL4.1.10)
GUIDE INDICATOR 3
(PL4.1.36)
JG3027AA

Removal

1) Remove the COVER CST (PL4.1.1) from the 550 PAPER CASSETTE.
2) Remove the HANDLE EXTENSION 550 (PL4.1.41). (RRP4.7)

NOTE **When removing the HANDLE EXTENSION 550, the LOW INDICATOR (PL4.1.37) and LOW IND FRONT (PL4.1.38) will be detached. Be careful not to lose them.**

3) While pressing down the lock of the STOPPER GEAR (PL4.1.29), release the lock of the LEVER BTM LOCK (PL4.1.27) to lift up the PLATE ASSY BTM (PL4.1.10).
4) Remove the link lever of the GUIDE INDICATOR 1 (PL4.1.34) from the hole of the PLATE ASSY BTM.
5) While pressing the link lever down to the bottom side of the 550 PAPER CASSETTE, slowly but firmly draw the GUIDE INDICATOR 3 out from the front side of the HOUSING EXTENSION 550 (PL4.1.42).

Replacement

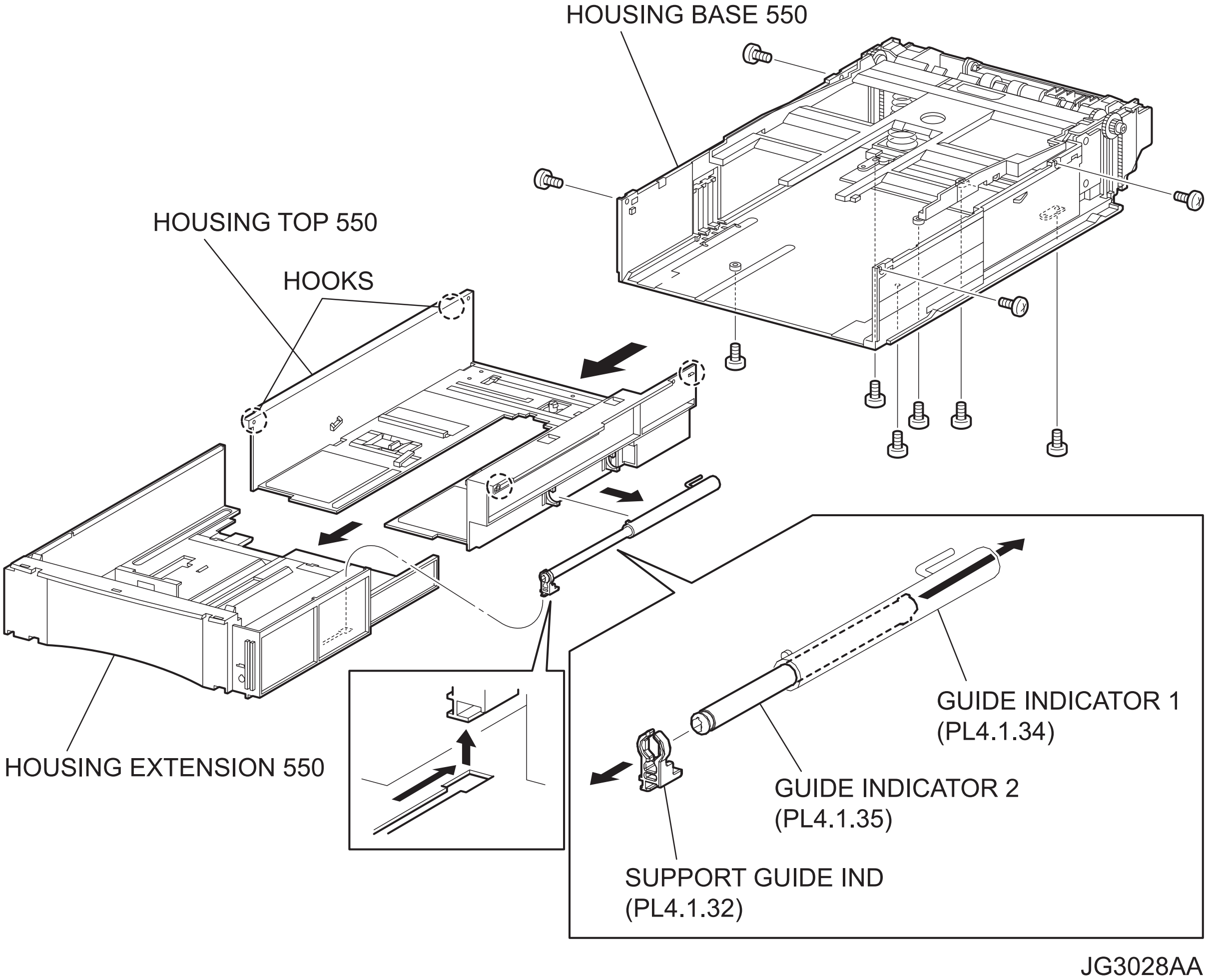
1) While pressing the link lever down to the bottom side of the 550 PAPER CASSETTE, insert the GUIDE INDICATOR 3 to the HOUSING EXTENSION 550 (PL4.1.42) from the front side.

NOTE **Be sure to align the groove of the GUIDE INDICATOR 1 and the projection of the GUIDE INDICATOR 3.**

2) Insert the link lever of the GUIDE INDICATOR 1 (PL4.1.34) to the hole of the PLATE ASSY BTM.
3) Install the LOW INDICATOR (PL4.1.37) and LOW IND FRONT (PL4.1.38). (RRP4.10)
4) Install the HANDLE EXTENSION 550 (PL4.1.41). (RRP4.7)
5) Install the COVER CST (PL4.1.1) to the 5550 PAPER CASSETTE.

NOTE **After assembling, make sure that the LOW IND FRONT moves up-and-down in conjunction with the up-and-down movement of the PLATE ASSY BTM**

RRP4.9 GUIDE INDICATOR 2 (PL4.1.35)


HOUSING BASE 550
HOUSING TOP 550
HOOKS
HOUSING EXTENSION 550
GUIDE INDICATOR 1
(PL4.1.34)
GUIDE INDICATOR 2
(PL4.1.35)
SUPPORT GUIDE IND
(PL4.1.32)
JG3028AA

Removal

1) Remove the COVER CST (PL4.1.1) from the 550 PAPERE CASSETTE.
2) Release the lock of the LOCK EXTENSION, and draw out the cassette extension as far as it will go.
3) Release the hooks securing the GEAR PINION (PL4.1.12) to the HOUSING TOP 550 (PL4.1.16), and remove the GEAR PINION.
4) While pressing down the lock of the STOPPER GEAR (PL4.1.29), release the lock of the LEVER BTM LOCK (PL4.1.27) to lift up the PLATE ASSY BTM. (Figure 4.5)
5) Slide the GUIDE ASSY SD L550 (PL4.1.11) inward, and remove it from the HOUSING TOP 550 by pressing down the hook of the HOUSING TOP 550.
6) Slide the GUIDE ASSY SD R550 (PL4.1.13) inward, and remove it from the HOUSING TOP 550 by pressing down the hook of the HOUSING TOP 550.
7) Remove the 2 screws (gold tapping, 8mm) from both right and left sides, as well as the 6 screws (gold tapping, 8mm) on the back, that secure the HOUSING TOP 550 (PL4.1.16) to the HOUSING BASE 550 (PL4.1.44).
8) Turn the 550 PAPER CASSETTE over, and pull out the HOUSING TOP 550 frontward about 20 mm to release the claws that on the top of the PLATE ASSY BTM from the hooks of the HOUSING TOP 550.
9) Release the 4 hooks of the HOUSING TOP 550, and remove the HOUSING TOP 550 and HOUSING EXTENSION 550 (PL4.1.42) from the HOUSING BASE 550.
10) Slide the SUPPORT GUIDE IND (PL4.1.32), and remove it from the groove of the HOUSING EXTENSION 550. Then, separate the HOUSING TOP 550 and HOUSING EXTENSION 550.
11) Remove the GUIDE INDICATOR 1 (PL4.1.34) from the hooks of the HOUSING TOP 550, and remove the SUPPORT GUIDE IND together with the GUIDE INDICATOR 1 and GUIDE INDICATOR 2 from the HOUSING TOP 550.
12) Release the hook of the SUPPORT GUIDE IND, and remove the SUPPORT GUIDE IND from the GUIDE INDICATOR 2.
13) Extract the GUIDE INDICATOR 2 from the back side of the GUIDE INDICATOR 1.

Replacement

1) Insert the GUIDE INDICATOR 2 into the hole of the GUIDE INDICATOR 1 (PL4.1.34) from back.
2) Install the SUPPORT GUIDE IND (PL4.1.32) to the GUIDE INDICATOR2, and secure it with the hook.

NOTE **Install the SUPPORT GUIDE IND to the GUIDE INDICATOR 2 in the direction shown in the figure.**

3) Install the SUPPORT GUIDE IND together with the GUIDE INDICATOR 1 and GUIDE INDICATOR 2 to the HOUSING TOP 550 (PL4.1.16), and secure the GUIDE INDICATOR 1 using the 2 hooks of the HOUSING TOP 550.
4) Slide the SUPPORT GUIDE IND (PL4.1.32) along the groove of the HOUSING EXTENSION 550 to install, and assemble the HOUSING TOP 550 and HOUSING EXTENSION 550 into 1 unit.
5) Install the HOUSING EXTENSION 550 and HOUSING TOP 550 (PL4.1.16) to the HOUSING BASE 550 while pushing the LINK SW SIZE1-550 (PL4.1.45), LINK SW SIZE2-550 (PL4.1.46) and LINK SW SIZE3-550 (PL4.1.47) of the HOUSING BASE 550 outward as shown in the figure.(Figure 4.2)

NOTE **Be sure to put 2 claws that on the top of the PLATE ASSY BTM under the hooks on the HOUSING TOP 550.**

6) After assembling the HOUSING TOP 550 to the HOUSING BASE 550 using the 4 hooks, secure them using the 2 screws (gold tapping, 8mm) on both right and left sides, as well as the 6 screws (gold tapping, 8mm) on the back.

NOTE **After tightening the screws, move the GUIDE ASSY END 550 back and forth, and make sure that the LINK SW SIZEs operate smoothly.**

7) Insert the link lever of the GUIDE INDICATOR1 (PL4.1.34) into the hole of the PLATE ASSY BTM.
8) While pressing down the hook of the HOUSING TOP 550, install the GUIDE ASSY SD R550 (PL4.1.13) to the HOUSING TOP 550.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD R550 sit correctly in the grooves of the HOUSING TOP 550.**

9) While pressing down the hook of the HOUSING TOP 550, install the GUIDE ASSY SD L550 (PL4.1.11) to the HOUSING TOP 550.

NOTE **After installing, make sure that the 3 claws of the GUIDE ASSY SD L550 sit correctly in the grooves of the HOUSING TOP 550.**

10) Push the PLATE ASSY BTM downward to lock.
11) Install the GEAR PINION (PL4.1.12) to the HOUSING TOP 550.

NOTE **When installing the GEAR PINION, make sure the GUIDE ASSY SD R550 and GUIDE ASSY SD L550 are completely opened. If not, the side register may be misaligned.**

12) Install the COVER CST (PL4.1.1) to the 550 PAPER CASSETTE.

NOTE **After assembling, make sure that the LOW IND FRONT moves up-and-down in conjunction with the up-and-down movement of the PLATE ASSY BTM**

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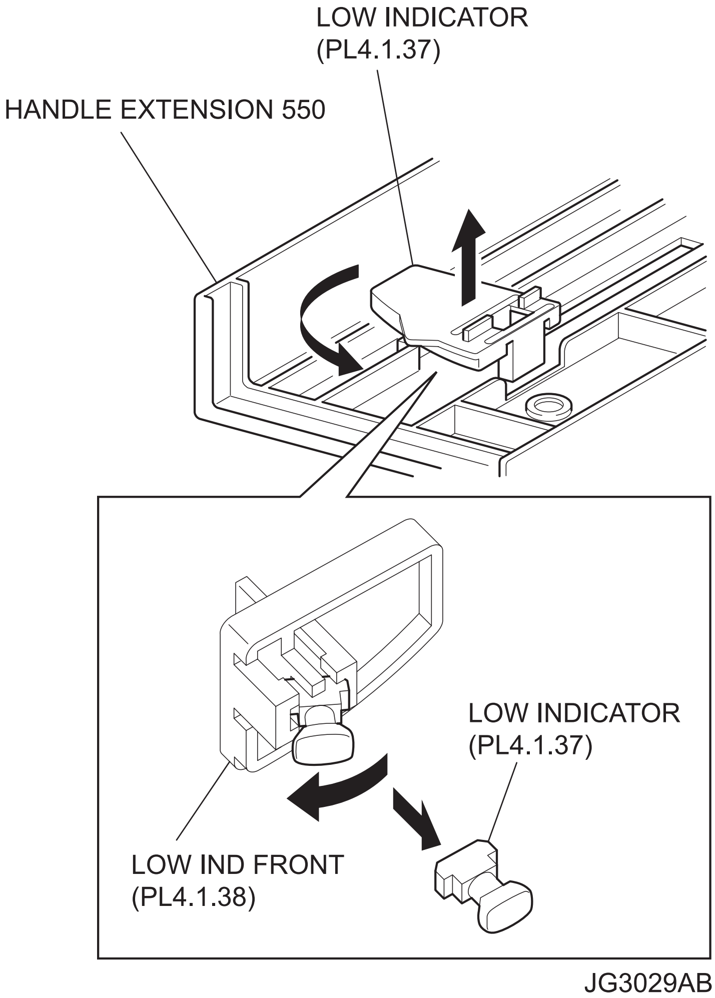
RRP4.10 LOW IND FRONT (PL4.1.38)


LOW INDICATOR
(PL4.1.37)
HANDLE EXTENSION 550
LOW INDICATOR
(PL4.1.37)
LOW IND FRONT
(PL4.1.38)
JG3029AB

Removal

1) Remove the COVER CST (PL4.1.1) from the 550 PAPER CASSETTE.
2) Remove the HANDLE EXTENSION 550 (PL4.1.41). (RRP4.7)
3) Turn the LOW INDICATOR (PL4.1.37) by 90 degrees, and remove it together with the LOW IND FRONT from the HANDLE EXTENSION 550.
4) Release the hook on the one side of the LOW IND FRONT, and remove the LOW IND FRONT from the LOW INDICATOR.

Replacement

1) Install the LOW IND FRONT to the LOW INDICATOR (PL4.1.37).

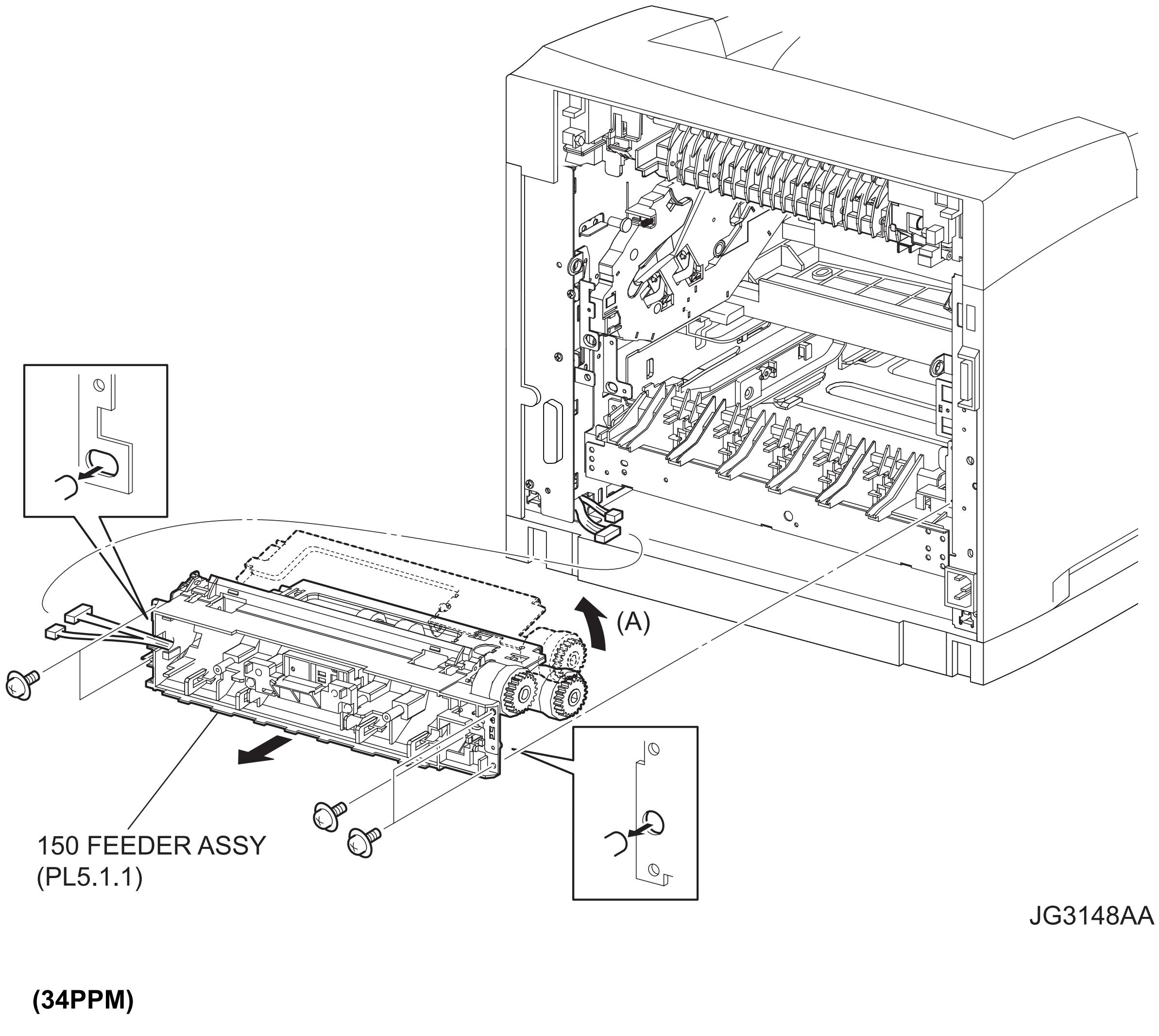
NOTE **When installing the LOW IND FRONT to the LOW INDICATOR, be careful in the installing direction of the LOW IND FRONT.**

2) Turn the LOW INDICATOR by 90 degrees in the opposite direction of the arrow, and install it together with the LOW IND FRONT to the HANDLE EXTENSION 550.
3) Install the HANDLE EXTENSION 550 (PL4.1.41). (RRP4.7)
4) Install the COVER CST (PL4.1.1) to the 550 PAPER CASSETTE.

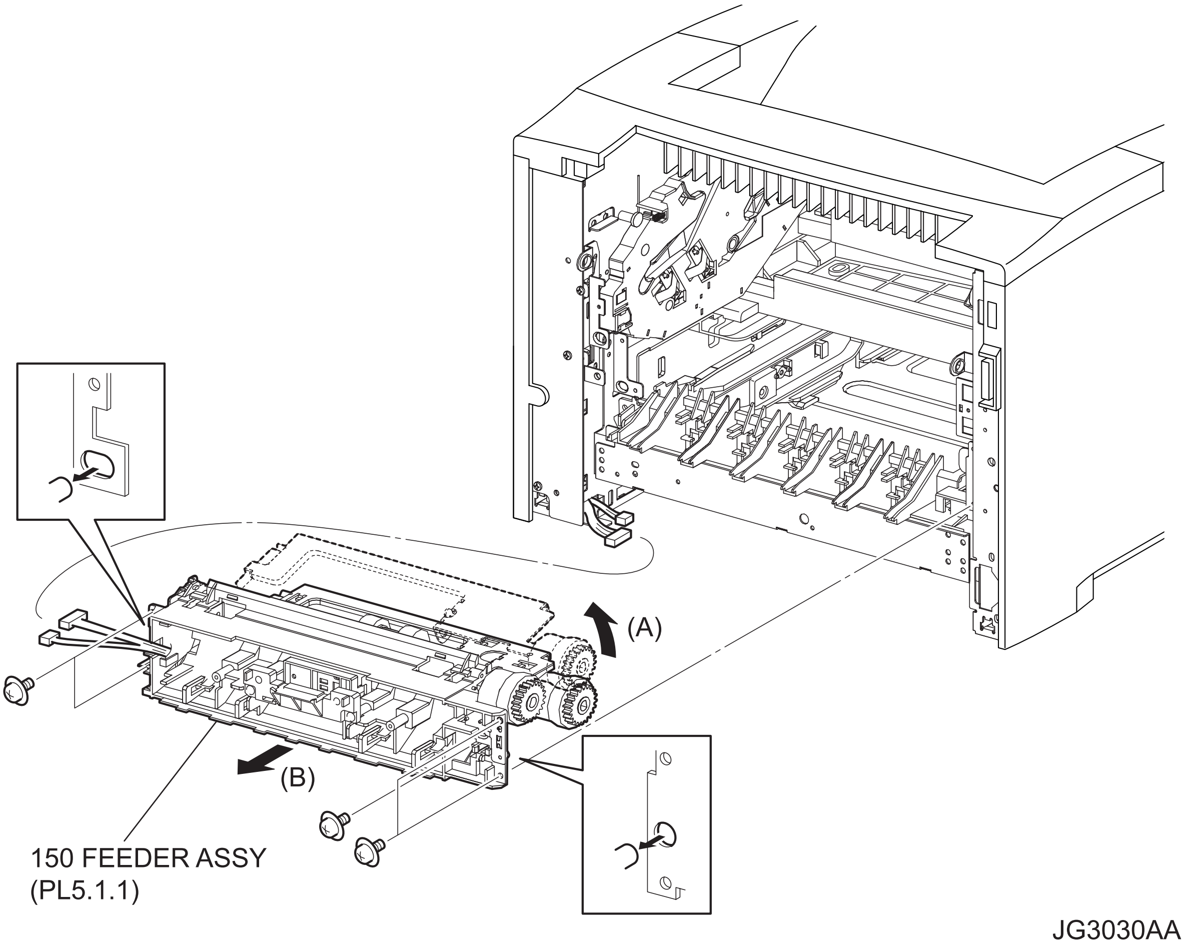
NOTE **After assembling, make sure that the LOW IND FRONT moves up-and-down in conjunction with the up-and-down movement of the PLATE ASSY BTM**

RRP5. 150 paper Feeder

RRP5.1   150 FEEDER ASSY (PL5.1.1)


(A)
150 FEEDER ASSY
(PL5.1.1)
JG3148AA

(34PPM)


(A)
(B)
150 FEEDER ASSY
(PL5.1.1)
JG3030AA

(24PPM)

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/PL9.1.12). (RRP10.9/9.4)
2) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
3) Remove the COVER REAR (PL1.1.3). (RRP1.1)
4) Remove the FAN MAIN (PL12.1.10). (RRP12.6)
5) Remove the CHUTE TRANSFER (PL8.1.22) together with the BTR ASSY. (RRP8.11)
6) Disconnect the connector (P/J245) of the HARNESS ASSY TRAY 1 (PL5.1.37) from the HARNESS ASSY CHUTE (PL12.1.17).
7) Disconnect the connector (P/J221) of the HARNESS ASSY TONER 1 (PL5.1.50) from the HARNESS ASSY TONER 2 (PL12.1.28).
8) Remove the 5 screws (silver with flange, 8mm) securing the 150 FEEDER ASSY to the printer.
9) Shift the 150 FEEDER ASSY backward, and remove the right boss of the 150 FEEDER ASSY from the frame.
10) Lift up the 150 FEEDER ASSY in the direction of the arrow (A), and remove the left boss of the 150 FEEDER ASSY.

NOTE **Althrough the 150 FEEDER ASSY clicks into midway when lifted up, push it a little bit further.**

11) Remove the 150 FEEDER ASSY from the printer.

Replacement

1) While lifting up the 150 FEEDER ASSY in the direction of the arrow (A), and install it to the printer. Then, iput the bosses at right and left of the 150 FEEDER ASSY into the holes of the printer.
2) Secure the 150 FEEDER ASSY to the printer using the 5 screws (silver with flange, 8mm).

NOTE **One of the screws that secure the 150 FEEDER ASSY is tightened together with the EARTH PLATE BASE (PL5.1.27).**

3) Connect the connector (P/J221) of the HARNESS ASSY TONER 1 (PL5.1.50) to the HARNESS ASSY TONER 2 (PL12.1.28).
4) Connect the connector (P/J 245) of the HARNESS ASSY TRAY 1 (PL5.1.37) to the HARNESS ASSY CHUTE (PL12.1.17).
5) Install the CHUTE TRANSFER (PL8.1.22) together with the BTR ASSY to the printer. (RRP8.11)

NOTE **Do not tighten the screw to the left side hole of the CHUTE TRANSFER.**

6) Install the FAN MAIN (PL12.1.10). (RRP12.6)
7) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

8) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
9) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/PL9.1.12). (RRP10.9/9.4)

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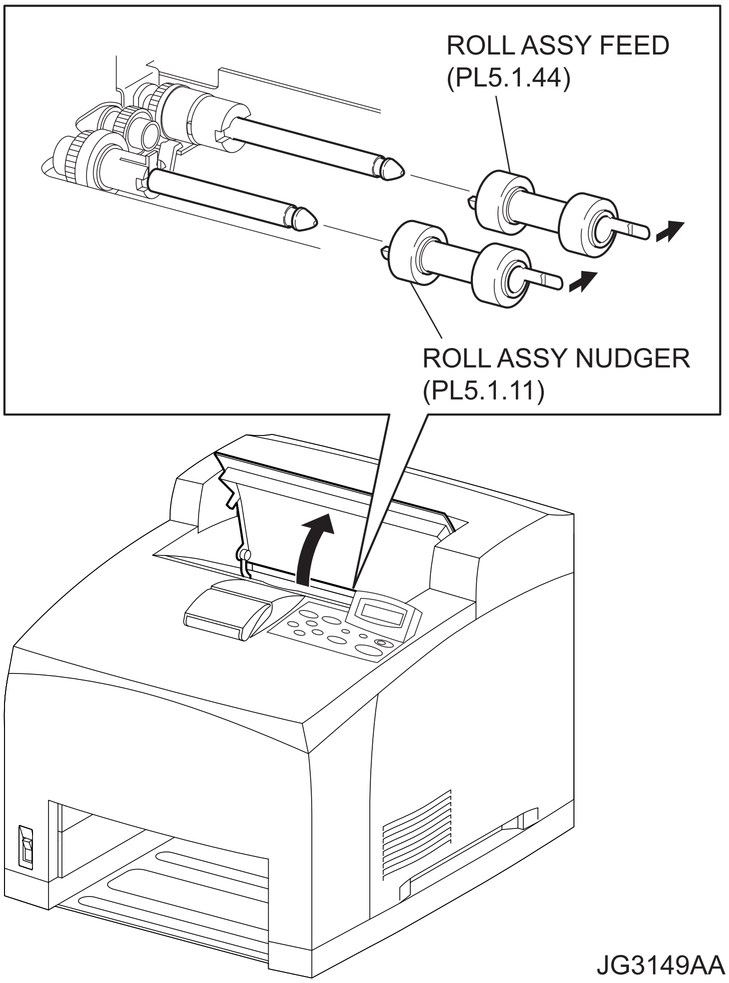
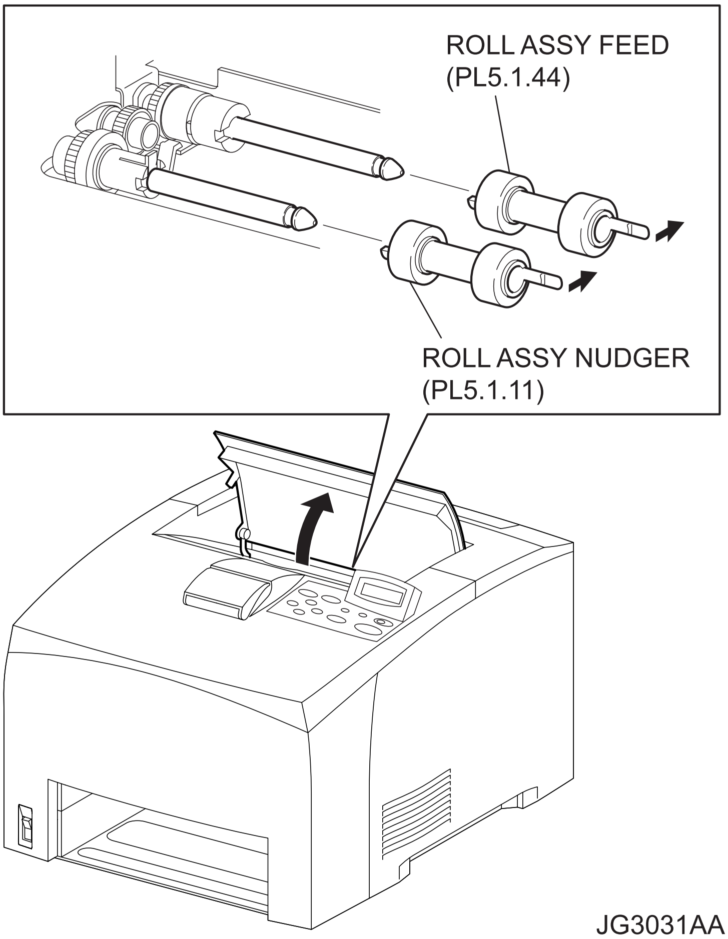
RRP5.2   ROLL ASSY NUDGER (PL5.1.11), ROLL ASSY FEED (PL5.1.44)


ROLL ASSY FEED
(PL5.1.44)
ROLL ASSY NUDGER
(PL5.1.11)
JG3149AA

(34PPM)


ROLL ASSY FEED
(PL5.1.44)
ROLL ASSY NUDGER
(PL5.1.11)
JG3031AA

(24PPM)

Removal

1) Open the COVER OPEN (PL1.1.2).
2) Release the hook securing the ROLL ASSY NUDGER, and pull the ROLL ASSY NUDGER out from the SHAFT NUDGER (PL5.1.9).
3) Release the hook securing the ROLL ASSY FEED, and pull the ROLL ASSY FEED out from the SHAFT FEED (PL5.1.41).

NOTE **When removing, do not hold the rubber rollers of the ROLL ASSY NUDGER and ROLL ASSY FEED.**

Replacement

NOTE **The ROLL ASSY FEED and ROLL ASSY NUDGER are the same parts, althrough the names differ.**

1) Install the ROLL ASSY FEED to the SHFT FEED (PL5.1.41), and secure the ROLL ASSY FEED with the hook.

NOTE **Be sure to install the hook of the ROLL ASSY FEED into the groove of the SHAFT FEED.**

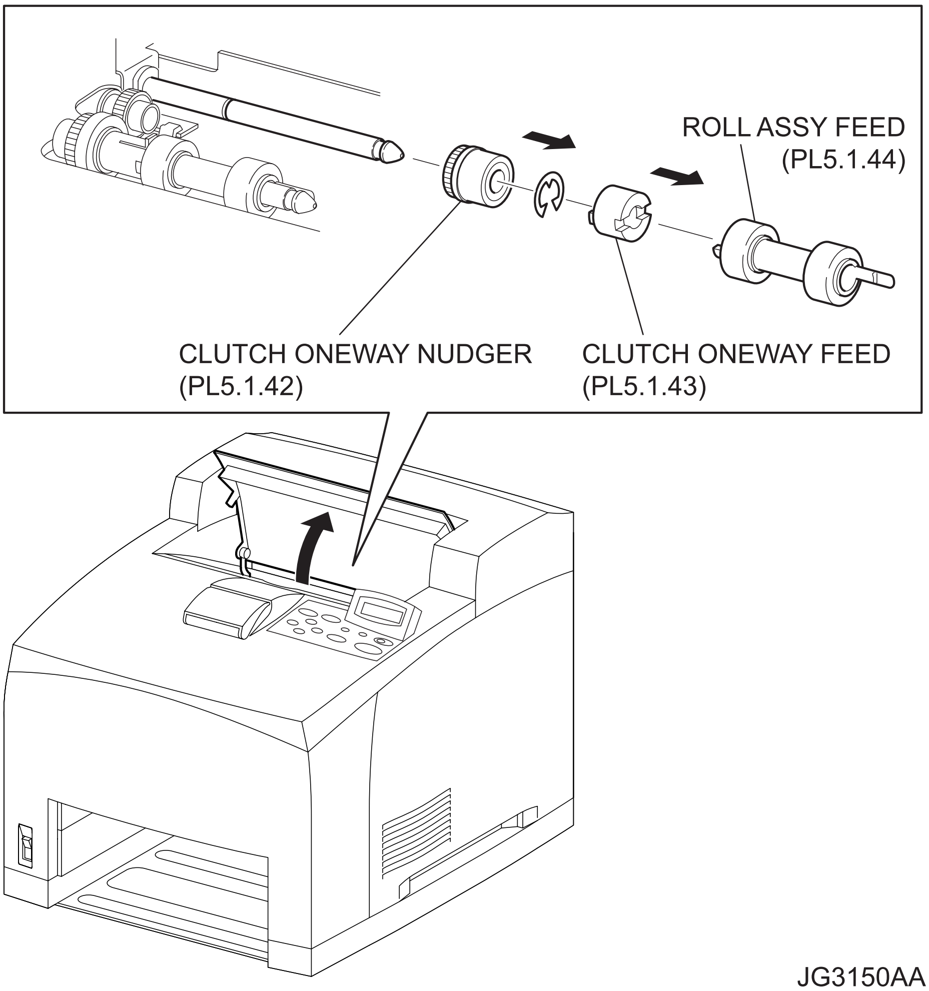
2) Install the ROLL ASSY NUDGER to the SHFT NUDGER (PL5.1.9), and secure the ROLL ASSY NUDGER with the hook.

NOTE **Be sure to install the hook of the ROLL ASSY NUDGER into the groove of the SHAFT NUDGER.**

3) Close the COVER OPEN (PL1.1.2).

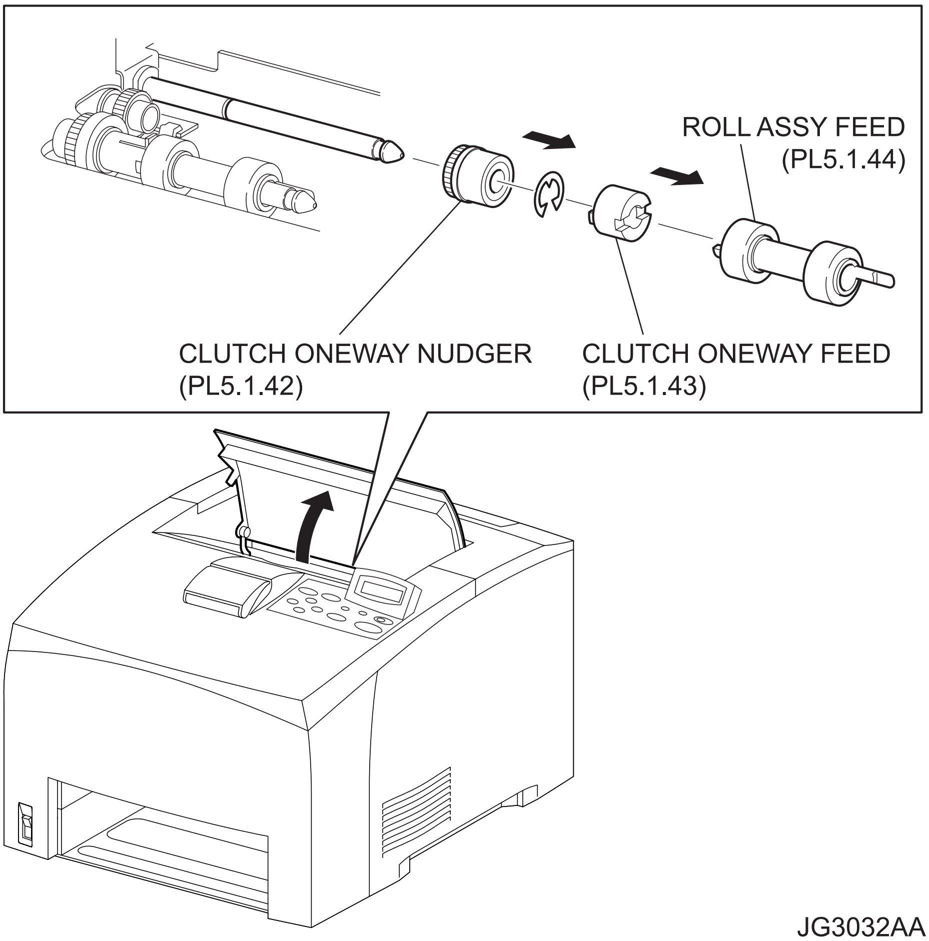
Blank Page

RRP5.3 CLUTCH ONEWAY NUDGER (PL5.1.42)


ROLL ASSY FEED
(PL5.1.44)
CLUTCH ONEWAY NUDGER
(PL5.1.42)
CLUTCH ONEWAY FEED
(PL5.1.43)

JG3150AA

(34PPM)


ROLL ASSY FEED
(PL5.1.44)
CLUTCH ONEWAY NUDGER
(PL5.1.42)
CLUTCH ONEWAY FEED
(PL5.1.43)
JG3032AA

(24PPM)

Removal

1) Open the COVER OPEN (PL1.1.2).
2) Remove the ROLL ASSY FEED (PL5.1.44). (RRP5.2)

NOTE **When removing, do not hold the rubber rollers of the ROLL ASSY FEED.**

3) Pull out the CLUTCH ONEWAY FEED (PL5.1.43) from the SHAFT FEED (PL5.1.41).
4) Remove the E-ring securing the CLUTCH ONEWAY NUDGER (PL5.1.42) to the SHAFT FEED.
5) Pull out the CLUTCH ONEWAY NUDGER from the SHAFT FEED.

Replacement

1) Install the CLUTCH ONEWAY NUDGER (PL5.1.42) to the SHAFT FEED (PL5.1.41).
2) Clip the E-ring to the SHAFT FEED to secure the CLUTCH ONEWAY NUDGER.
3) Install the CLUTCH ONEWAY FEED (PL5.1.43) to the SHAFT FEED.
4) Install the ROLL ASSY FEED (PL5.1.44) to the SHAFT FEED, and secure it with the hook. (RRP5.2)

NOTE **Be sure to install the hook of the ROLL ASSY FEED into the groove of the SHAFT FEED.**

5) Close the COVER OPEN (PL1.1.2).

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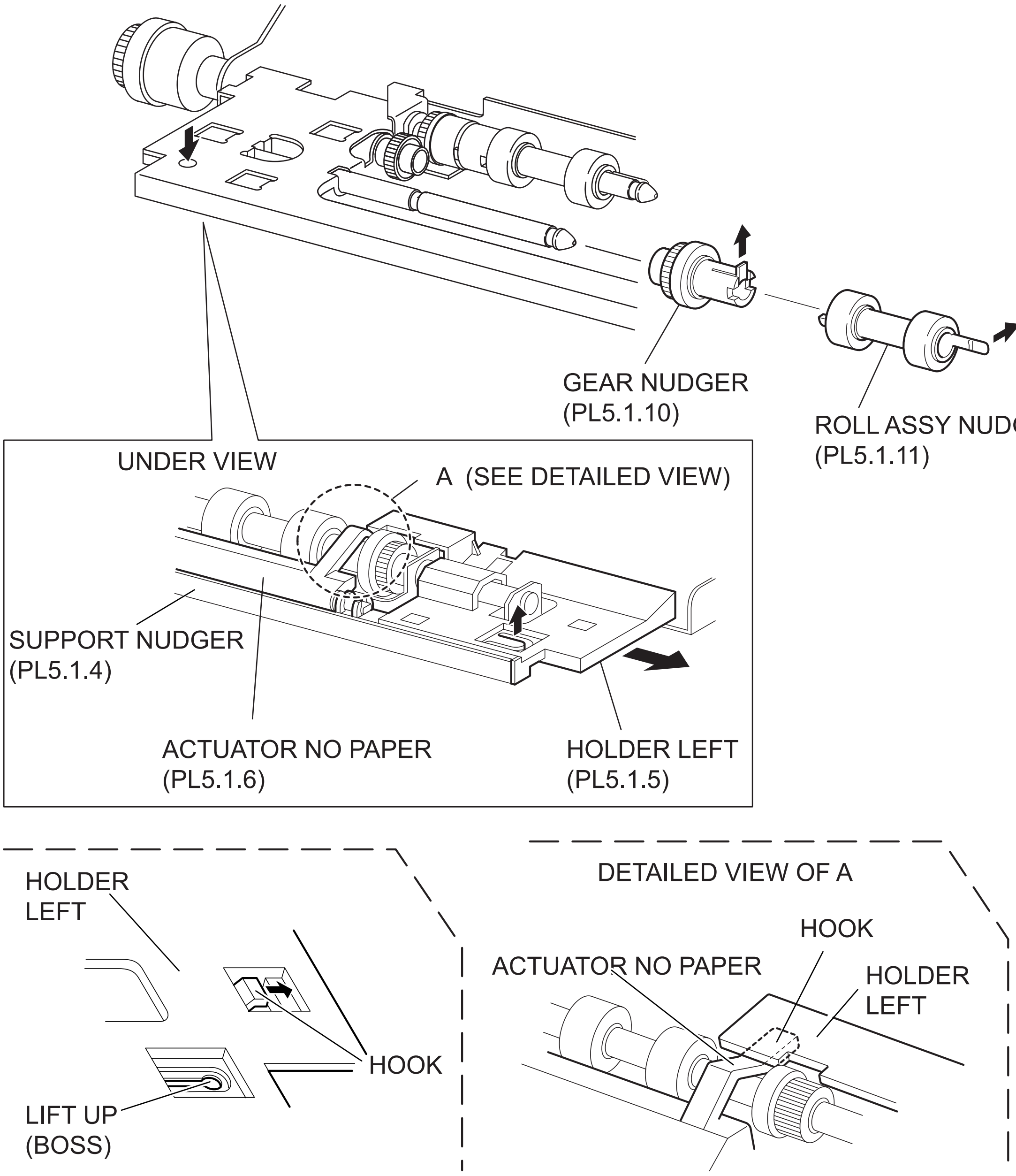
RRP5.4   GEAR NUDGER (PL5.1.10)


GEAR NUDGER
(PL5.1.10)
ROLL ASSY NUDGER
(PL5.1.11)
UNDER VIEW
A (SEE DETAILED VIEW)
SUPPORT NUDGER
(PL5.1.4)
ACTUATOR NO PAPER
(PL5.1.6)
HOLDER LEFT
(PL5.1.5)
HOLDER
LEFT
HOOK
LIFT UP
(BOSS)
DETAILED VIEW OF A
HOOK
ACTUATOR NO PAPER
HOLDER
LEFT

JG3033AA

Removal

1) Open the COVER OPEN (PL1.1.2).
2) While pressing down the boss of the HOLDER LEFT (PL5.1.5) at the back of the 150 FEEDER ASSY, shift the HOLDER LEFT in the direction of the arrow to remove the 3 hooks.
3) Remove the HOLDER LEFT from the SUPPORT NUDGER (PL5.1.4). At the same time, the ACTUATOR NO PAPER (PL5.1.6) is removed.
4) Release the hook of the ROLL ASSY NUDGER (PL5.1.11), and pull the ROLL ASSY NUDGER out from the SHAFT NUDGER (PL5.1.9).
5) Release the hook of the GEAR NUDGER, and pull the GEAR NUDGER out from the SHAFT NUDGER.

NOTE **When removing, do not hold the rubber rollers of the ROLL ASSY NUDGER and GEAR NUDGER.**

Replacement

1) Install the GEAR NUDGER to the SHFT NUDGER (PL5.1.9), and secure the GEAR NUDGER with the hook.

NOTE **When installing, do not hold the rubber rollers of the ROLL ASSY NUDGER and GEAR NUDGER.**

NOTE **Be sure to install the hook of the GEAR NUDGER into the groove of the SHAFT NUDGER.**

2) Install the ROLL ASSY NUDGER (PL5.1.11) to the SHFT NUDGER, and secure the ROLL ASSY NUDGER with the hook.

NOTE **Be sure to install the hook of the ROLL ASSY NUDGER into the groove of the SHAFT NUDGER.**

3) Install the HOLDER LEFT (PL5.1.5) and ACTUATOR NO PAPER (PL5.1.6) to the SUPPORT NUDGER (PL5.1.4).

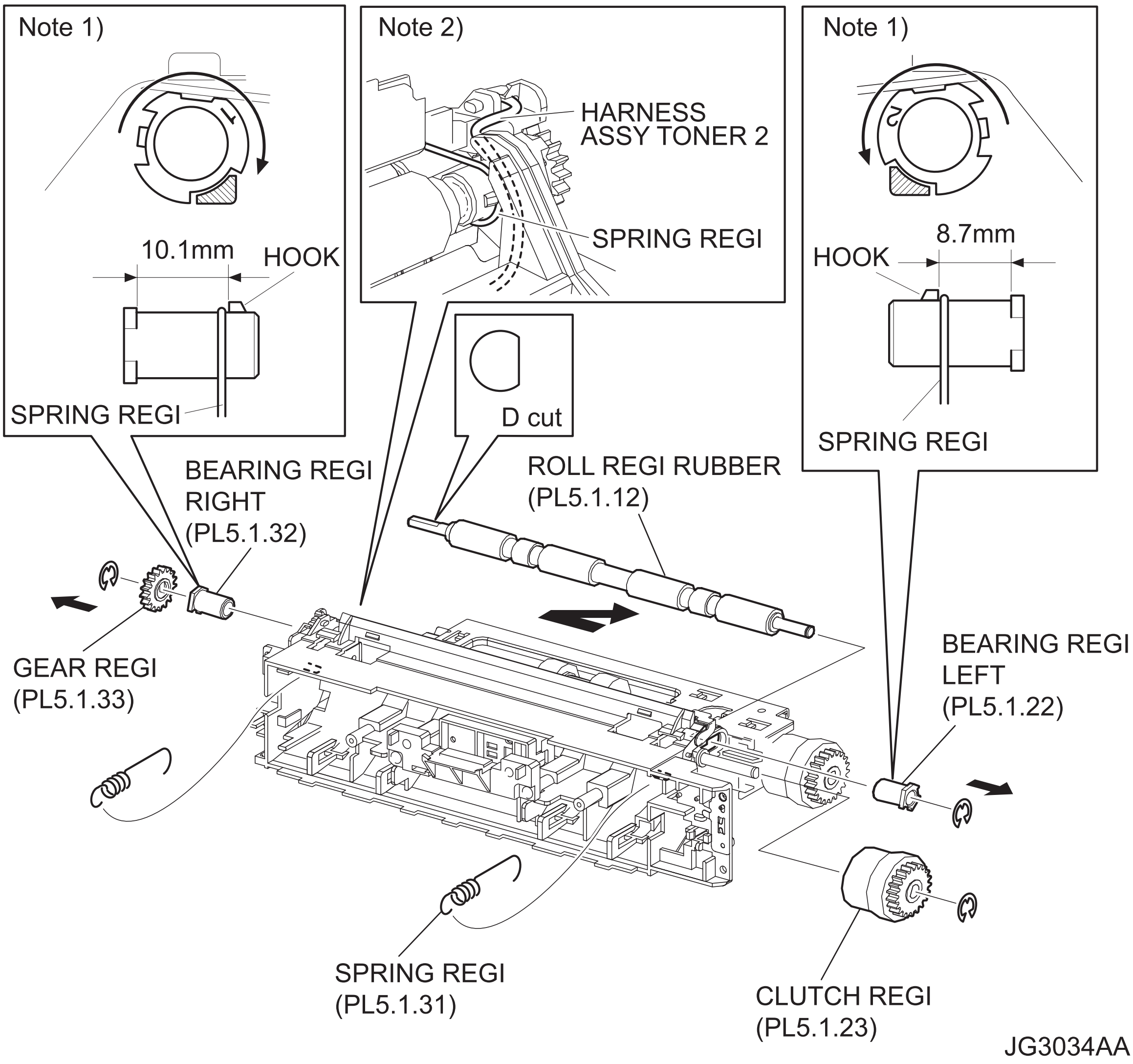
NOTE **Be sure to install the shafts on both ends of the ACTUATOR NO PAPER into the HOLDER LEFT and SUPPORT NUDGER.**

NOTE **Assemble the hook of the ACTUATOR NO PAPER to the HOLDER LEFT as shown in the figure.**

4) Move the HOLDER LEFT (PL5.1.5) in the opposite direction of the arrow, and secure it to the 150 FEEDER ASSY with the 3 hooks.

NOTE **After installing, move the ACTUATOR NO PAPER with a finger, and make sure that the ACTUATOR NO PAPER operates smoothly.**

RRP5.5 ROLL REGI RUBBER (PL5.1.12)


Note 1)
10.1mm
HOOK
SPRING REGI
Note 2)
HARNESS ASSY TONER 2
SPRING REGI
Note 1)
8.7mm
HOOK
SPRING REGI
D cut
BEARING REGI RIGHT (PL5.1.32)
ROLL REGI RUBBER (PL5.1.12)
GEAR REGI (PL5.1.33)
BEARING REGI LEFT (PL5.1.22)
SPRING REGI (PL5.1.31)
CLUTCH REGI (PL5.1.23)
JG3034AA

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/PL9.1.12). (RRP10.9/9.4)
2) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
3) Remove the COVER REAR (PL1.1.3). (RRP1.1)
4) Remove the FAN MAIN (PL12.1.10). (RRP12.6)
5) Remove the CHUTE TRANSFER (PL8.1.22) together with the BTR ASSY. (RRP8.11)
6) Remove the 150 FEEDER ASSY (PL5.1.1). (RRP5.1)
7) Remove 2 SPRING REGIs (PL5.1.31) hanging to the CHUTE REGI (PL5.1.25) and ROLL REGI RUBBER (PL5.1.12) on both sides of the 150 FEEDER ASSY.
8) Remove the E-ring securing the GEAR REGI RUBBER (PL5.1.33) to the ROLL REGI RUBBER, and remove the GEAR REGI RUBBER from the ROLL REGI RUBBER.
9) Remove the E-ring securing the BEARING REGI LEFT (PL5.1.22) to the ROLL REGI RUBBER.
10) Pull the BEARING REGI LEFT, and turn it in the direction of the arrow shown in the figure, and remove the notch of the BEARING REGI LEFT from the protrusion of the CHUTE REGI. (NOTE 1)
11) Pull the BEARING REGI LEFT out from the ROLL REGI RUBBER.
12) Remove the E-ring securing the CLUTCH REGI (PL5.1.23), and remove the CLUTCH REGI.
13) Pull the BEARING REGI RIGHT (PL5.1.32), and turn it in the direction of the arrow shown in the figure, and remove the notch of the BEARING REGI RIGHT from the protrusion of the CHUTE REGI. (NOTE 1)
14) Pull the BEARING REGI RIGHT out from the ROLL REGI RUBBER.
15) Shift the ROLL REGI RUBBER left, and extract the right of the ROLL REGI RUBBER from the hole of the CHUTE REGI, and then extract the ROLL REGI RUBBER upward.

NOTE **When removing, do not hold the rubber rollers of the ROLL REGI RUBBER.**

Replacement

1) Shift the ROLL REGI RUBBER in the opposite direction of the arrow, and install it to the 150 FEEDER ASSY.

NOTE **When installing, do not hold the rubber rollers of the ROLL REGI RUBBER.**

NOTE **Install the ROLL REGI RUBBER so that its D-cut is positioned at the BEARING REGI RIGHT side.**

2) Install the BEARING REGI RIGHT (PL5.1.32) to the ROLL REGI RUBBER.

NOTE **The shapes of the flange and the positions of the hook are different on the BEARING REGI RIGHT (white) and BEARING REGI LEFT (black).**

3) Turn the BEARING REGI RIGHT in the opposite direction of the arrow, and install it to the CHUTE REGI.
4) Install the BEARING REGI LEFT (PL5.1.22) to the ROLL REGI RUBBER.

NOTE **The shapes of the flange and the positions of the hook are different on the BEARING REGI RIGHT (white) and BEARING REGI LEFT (black).**

5) Turn the BEARING REGI LEFT in the opposite direction of the arrow, and install it to the CHUTE REGI.
6) Clip the E-ring to the ROLL REGI RUBBER to secure the BEARING REGI LEFT.

7) Install the GEAR REGI RUBBER (PL5.1.33) to the ROLL REGI RUBBER, and secure it using the E-ring.

8) Hang 2 SPRING REGIs (PL5.1.31) to the CHUTE REGI (PL5.1.25) and BEARING REGI RUBBER.

NOTE **When hanging the SPRING REGIs, make sure that the SPRING REGIs are hung to the boss of the CHUTE REGI, and to the inside of the hooks of the BEARING REGI LEFT and BEARING REGI RIGHT.**

After hanging the SPRING REGIs, make sure the SPRING REGIs have not pinched the HARNESS ASSY TONER 2. (Refer to NOTE2.)

9) Install the CLUTCH REGI (PL5.1.23). (RRP5.6)

10) Install the 150 FEEDER ASSY (PL5.1.1). (RRP5.1)

11) Install the CHUTE TRANSFER (PL8.1.22) together with the BTR ASSY. (RRP8.11)

NOTE **Do not tighten the screw to the left side hole of the CHUTE TRANSFER.**

12) Install the FAN MAIN (PL12.1.10). (RRP12.6)

13) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

14) Install the FUSER ASSY (PL8.1.20). (RRP8.8)

15) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/PL9.1.12). (RRP10.9/9.4)

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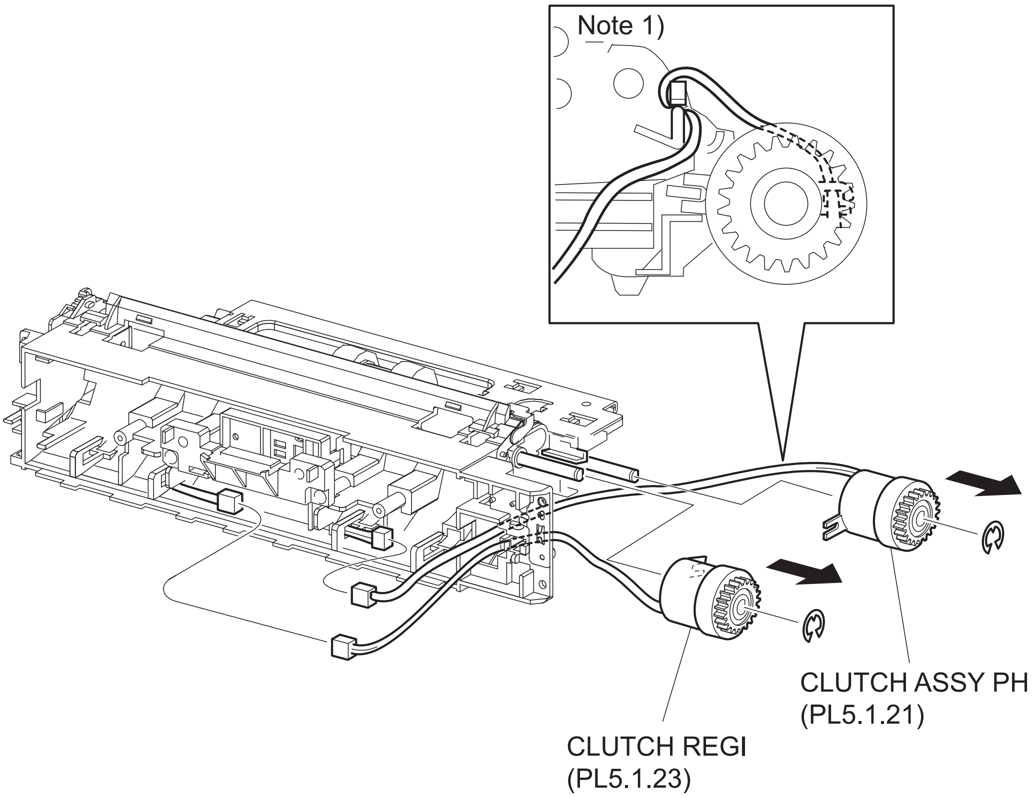
RRP5.6 CLUTCH ASSY PH (PL5.1.21), CLUTCH REGI (PL5.1.23)


Note 1)
CLUTCH ASSY PH
(PL5.1.21)
CLUTCH REGI
(PL5.1.23)

JG3035AB

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/PL9.1.12). (RRP10.9/9.4)
2) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
3) Remove the COVER REAR (PL1.1.3). (RRP1.1)
4) Remove the FAN MAIN (PL12.1.10). (RRP12.6)
5) Remove the CHUTE TRANSFER (PL8.1.22) together with the BTR ASSY. (RRP8.11)
6) Remove the 150 FEEDER ASSY (PL5.1.1). (RRP5.1)
7) Disconnect the connector (P/J242) of the CLUTCH ASSY PH from the HARNESS ASSY TRAY 1 (PL5.1.37).
8) Remove the E-ring securing the CLUTCH ASSY PH, and remove the CLUTCH ASSY PH from the SHAFT FEED (PL5.1.41).
9) Disconnect the connector (P/J243) of the CLUTCH REGI from the HARNESS ASSY TRAY 1.
10) Remove the E-ring securing the CLUTCH REGI, and remove the CLUTCH REGI from the ROLL REGI METAL (PL5.1.34).

Replacement

NOTE **The part names differ with the CLUTCH ASSY PH and CLUTCH REGI, but they are the same parts.**

1) Install the CLUTCH REGI to the ROLL REGI METAL (PL5.1.34), and secure it using the E-ring.

NOTE **When installing, make sure that the notch of the CLUTCH REGI is combined with the boss of the CHUTE REGI.**

2) Connect the connector (P/J243) of the CLUTCH REGI (PL5.1.41) to the HARNESS ASSY TRAY 1 (PL5.1.37).
3) Install the CLUTCH ASSY PH to the SAHFT FEED, and secure it using the E-ring.

NOTE **When installing, make sure that the notch of the CLUTCH ASSY PH is combined with the boss of the CHUTE REGI.**

NOTE **The harness of the CLUTCH ASY PH should be one turned around the portion of the CHUTE REGI as shown in the figure.**

4) Connect the connector (P/J242) of the CLUTCH ASSY PH to the HARNESS ASSY TRAY 1.
5) Install the 150 FEEDER ASSY (PL5.1.1). (RRP5.1)
6) Install the CHUTE TRANSFER (PL8.1.22) together with the BTR ASSY. (RRP8.11)

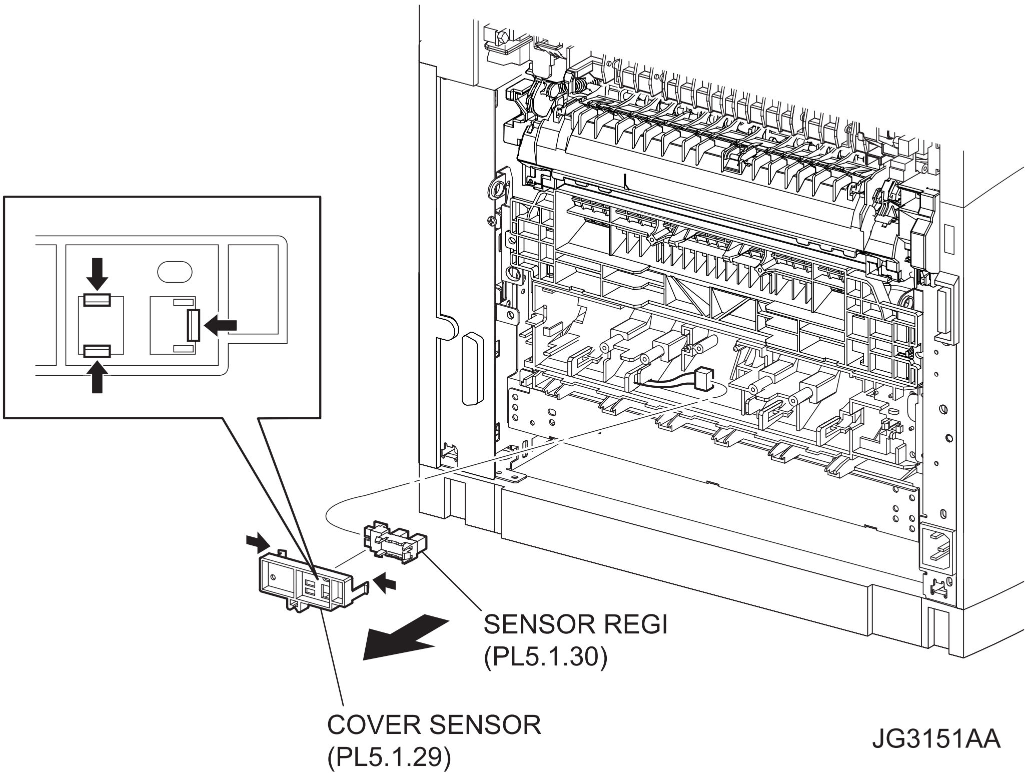
NOTE **Do not tighten the screw to the left side hole of the CHUTE TRANSFER.**

7) Install the FAN MAIN (PL12.1.10). (RRP12.6)
8) Install the COVER REAR (PL1.1.3). (RRP1.1)

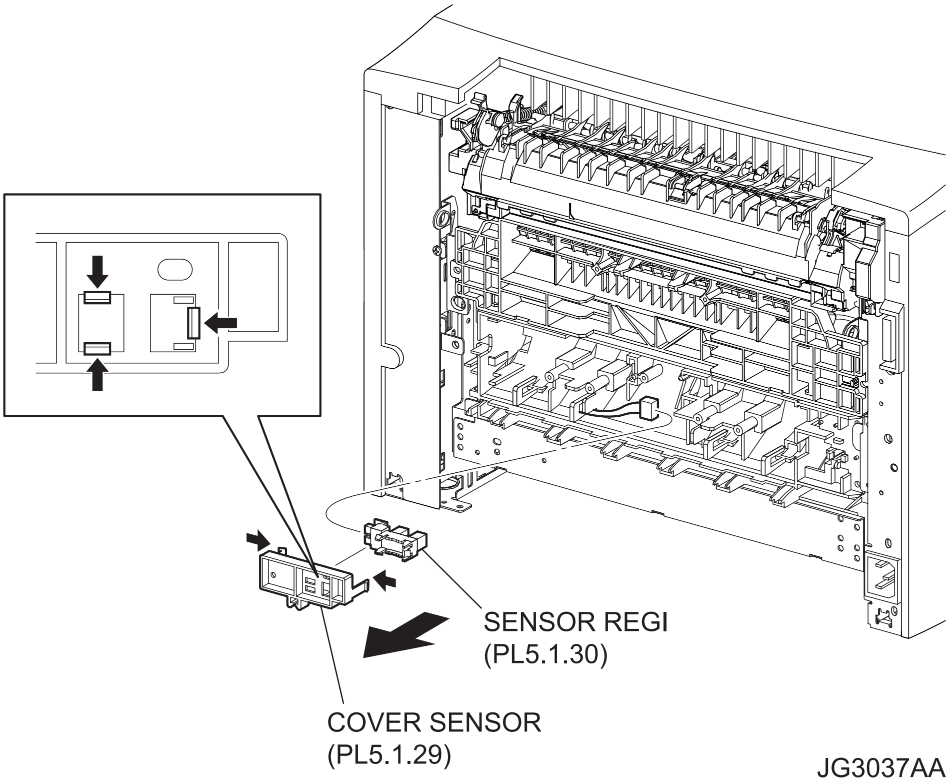
NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

9) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
10) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/PL9.1.12). (RRP10.9/9.4)

RRP5.7   SENSOR REGI (PL5.1.30)


SENSOR REGI
(PL5.1.30)
COVER SENSOR
(PL5.1.29)
JG3151AA

(34PPM)


SENSOR REGI
(PL5.1.30)
COVER SENSOR
(PL5.1.29)
JG3037AA

(24PPM)

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/PL9.1.12). (RRP10.9/9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the FAN MAIN (PL12.1.10). (RRP12.6)
4) Release the hooks securing the COVER SENSOR (PL5.1.29), and remove the COVER SENSOR from the CHUTE ASSY REGI.
5) Release the hooks securing the SENSOR REGI, and remove the SENSOR REGI from the COVER SENSOR.
6) Disconnect the connector (P/J241) of the HARNESS ASSY TRAY 1 (PL5.1.37) from the SENSOR REGI.

Replacement

1) Connect the connector (P/J241) of the HARNESS ASSY TRAY 1 (PL5.1.37) to the SENSOR REGI.
2) Install the SENSOR REGI to the COVER SENSOR (PL5.1.29), and secure it using hooks.
3) Install the COVER SENSOR to the CHUTE ASSY REGI, and secure it using hooks.
4) Install the FAN MAIN (PL12.1.10). (RRP12.6)
5) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

6) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/PL9.1.12). (RRP10.9/9.4)

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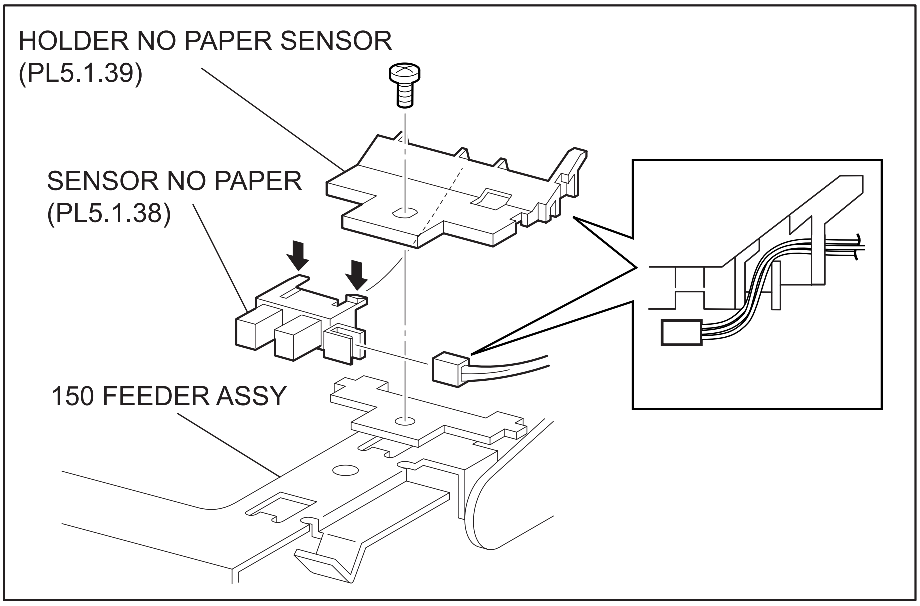
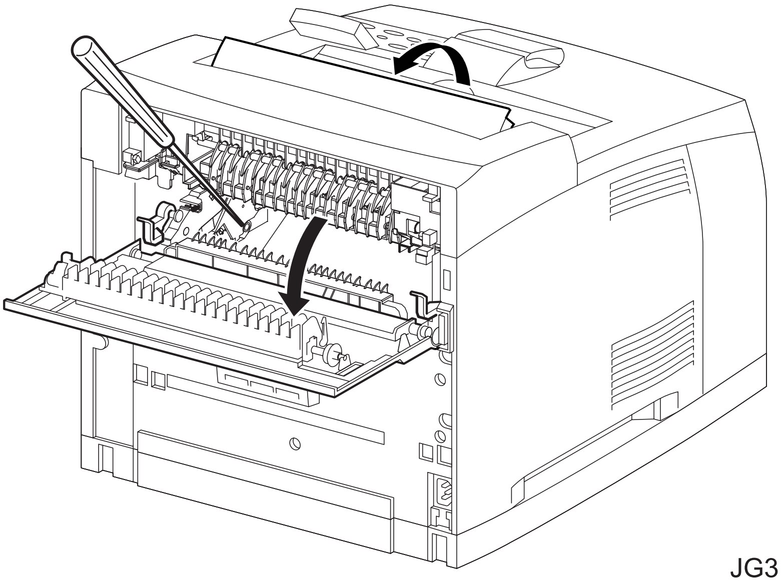
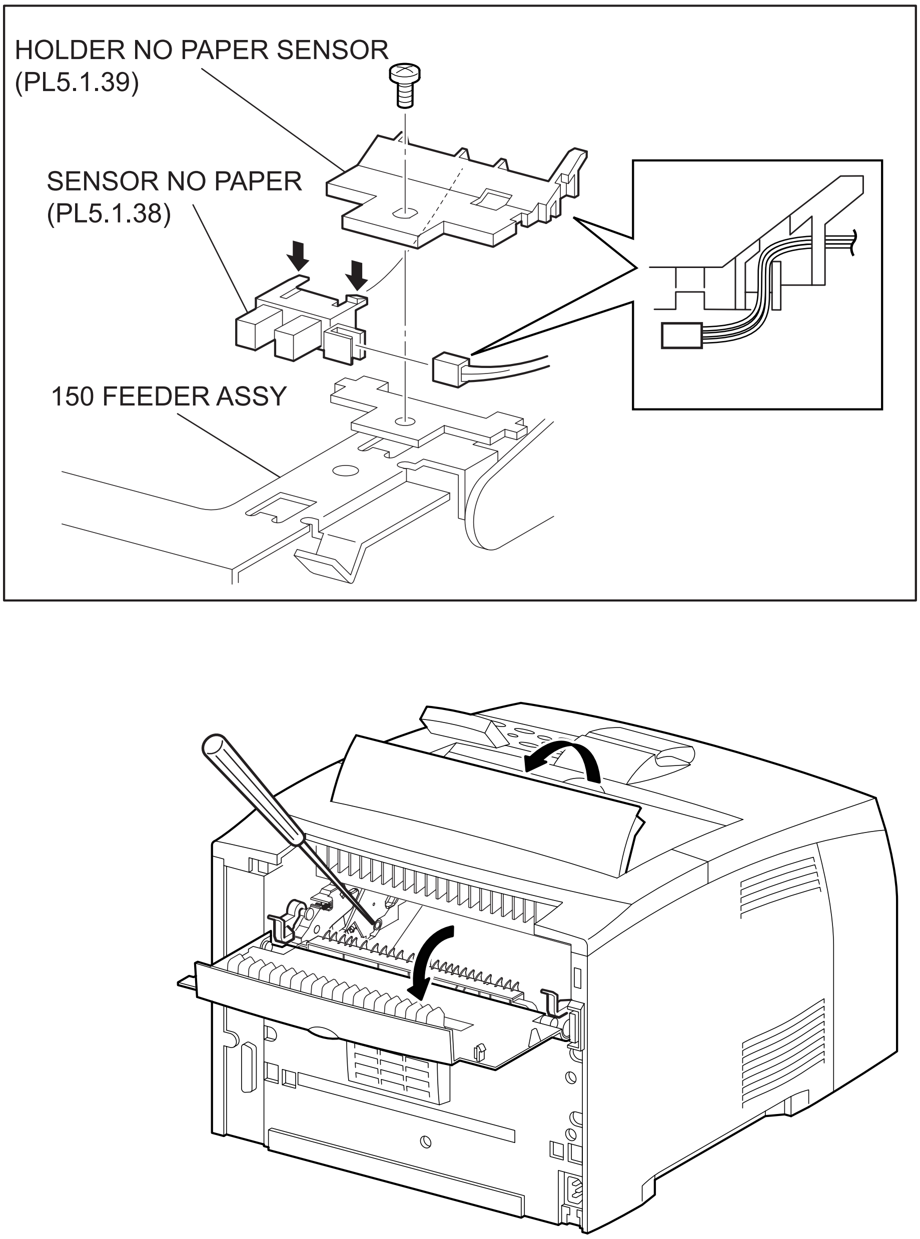
RRP5.8   SENSOR NO PAPER (PL5.1.38)


HOLDER NO PAPER SENSOR
(PL5.1.39)
SENSOR NO PAPER
(PL5.1.38)
150 FEEDER ASSY



(34PPM)


HOLDER NO PAPER SENSOR
(PL5.1.39)
SENSOR NO PAPER
(PL5.1.38)
150 FEEDER ASSY

JG3038AA

(24PPM)

Removal

1) Open the COVER OPEN (PL1.1.2).
2) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/PL9.1.12). (RRP10.9/9.4)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Lift up the 150 FEEDER ASSY a little, insert a screwdriver through the space left by the FUSER ASSY, and remove the screw (gold, 8mm) securing the HOLDER NO PAPER SENSOR (PL5.1.39).
5) Remove the HOLDER NO PAPER SENSOR from the 150 FEEDER ASSY.
6) Release the hooks securing the SENSOR NO PAPER to the HOLDER NO PAPER SENSOR, and remove the SENSOR NO PAPER.
7) Disconnect the HARNESS ASSY TRAY 1 (PL5.1.37) from the connector (P/J240) of the SENSOR NO PAPER.

Replacement

1) Connect the connector (P/J240) of the HARNESS ASSY TRAY 1 (PL5.1.37) to the connector of the SENSOR NO PAPER.
2) Install the SENSOR NO PAPER to the HOLDER NO PAPER SENSOR (PL5.1.39), and secure it using hooks.
3) Put the wires of the HARNESS ASSY TRAY 1 into the notch of the HOLDER NO PAPER SENSOR as shown in the figure.
4) Insert a screrwdriver through the space left by the FUSER ASSY, and install the HOLDER NO PAPER SENSOR to the 150 FEEDER ASSY using the screw (gold, 8mm).

NOTE **After tightening the screw, make sure that the wires of the HARNESS ASSY TRAY 1 have not pinched.**

5) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
6) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/PL9.1.12). (RRP10.9/9.4)
7) Close the COVER OPEN (PL1.1.2).

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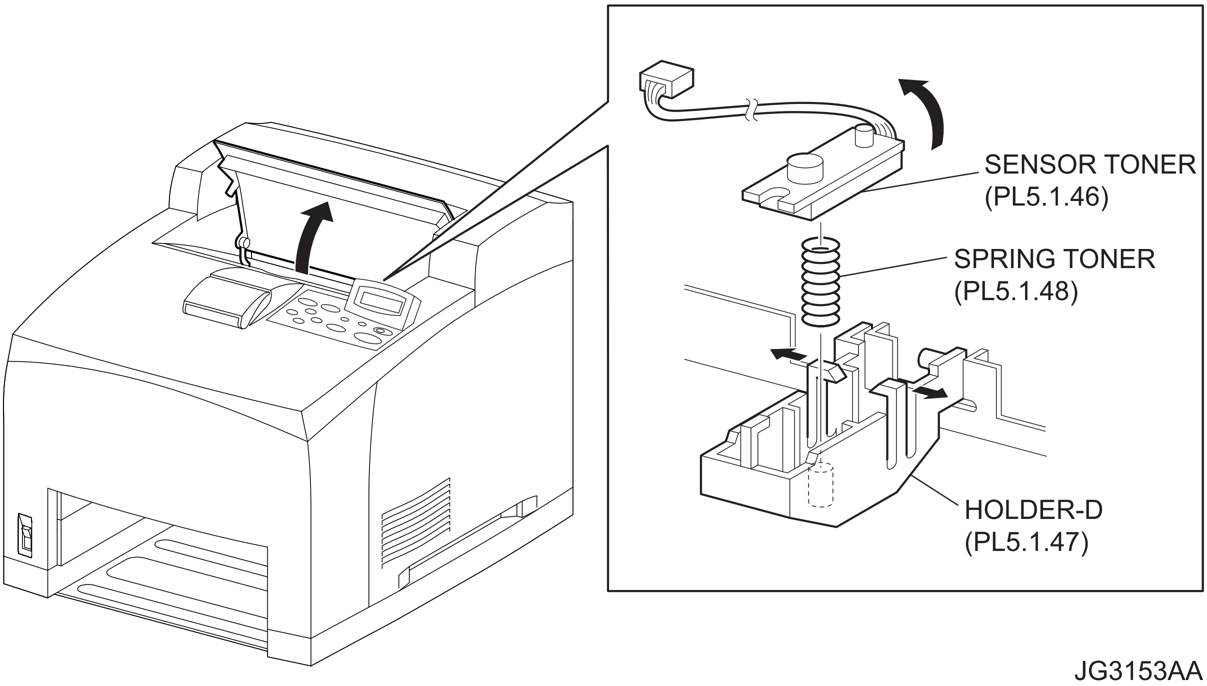
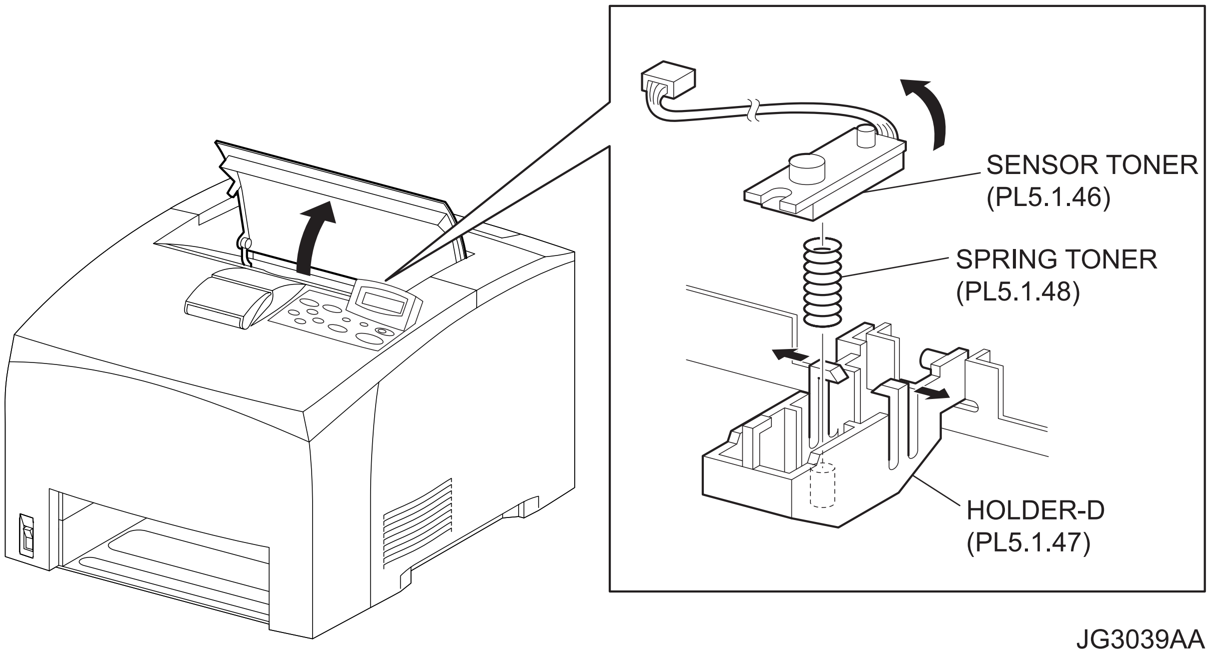
RRP5.9   SENSOR TONER (PL5.1.46)


SENSOR TONER
(PL5.1.46)
SPRING TONER
(PL5.1.48)
HOLDER-D
(PL5.1.47)
JG3153AA

(34PPM)


SENSOR TONER
(PL5.1.46)
SPRING TONER
(PL5.1.48)
HOLDER-D
(PL5.1.47)
JG3039AA

(24PPM)

Removal

1) Open the COVER OPEN (PL1.1.2).
2) Disconnect the connector (P/J220) of the SENSOR TONER from the HARNESS ASSY TONER 1 (PL5.1.50).
3) Release the holdings of the harness of the SENSOR TONER from 2 clampers.
4) Release 2 hooks of the HOLDER-D (PL5.1.47), and remove the SENSOR TONER from the HOLDER-D by turning it in the direction of the arrow.

NOTE **When removing the SENSOR TONER, be careful not to lose the SPRING TONER (PL5.1.48).**

Replacement

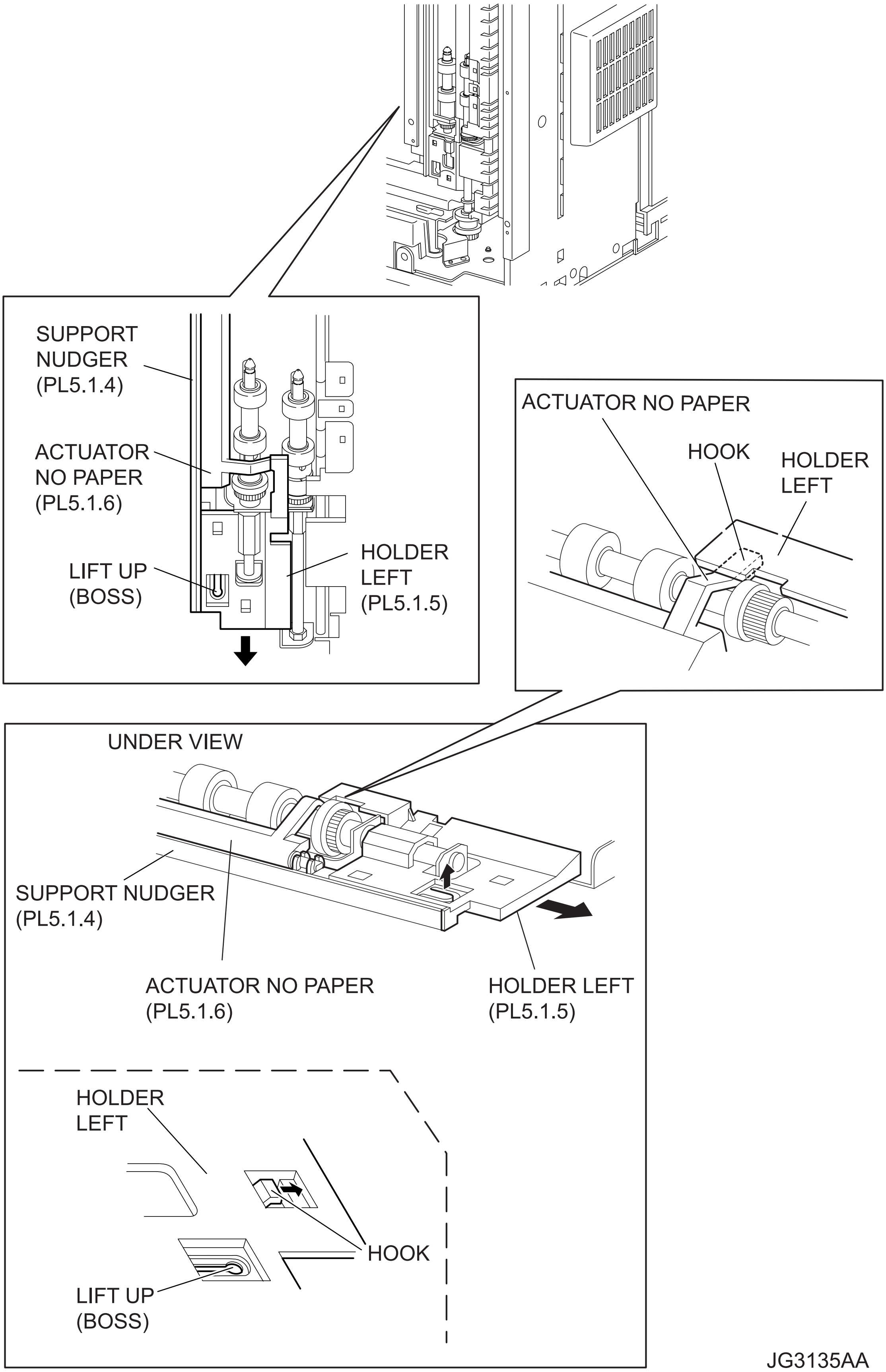
1) Install the SENSOR TONER to the HOLDER-D (PL5.1.47) by turning it in the opposite direction of the arrow, and secure it using 2 hooks.

NOTE **When installing the SENSOR TONER, put the SPRING TONER on the boss of the HOLDER-D, and then install the SENSOR TONER on it.**

2) Secure the harness of the SENSOR TONER using the 2 clampers.
3) Connect the connector (P/J220) of the SENSOR TONER to the HARNESS ASSY TRAY 1 (PL5.1.50).
4) Close the COVER OPEN (PL1.1.2).

Blank Page

RRP5.10   ACTUATOR NO PAPER (PL5.1.6)


SUPPORT NUDGER (PL5.1.4)
ACTUATOR NO PAPER (PL5.1.6)
LIFT UP (BOSS)
HOLDER LEFT (PL5.1.5)
ACTUATOR NO PAPER
HOOK
HOLDER LEFT
UNDER VIEW
SUPPORT NUDGER (PL5.1.4)
ACTUATOR NO PAPER (PL5.1.6)
HOLDER LEFT (PL5.1.5)
HOLDER LEFT
HOOK
LIFT UP (BOSS)

JG3135AA

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/PL9.1.12). (RRP10.9/9.4)
2) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
3) Place the printer down on its left side.

NOTE **Be careful not to scratch the cover, and do not given a shock to the printer from a top.**

4) Open the COVER OPEN (PL1.1.2).
5) While lifting up the boss of the HOLDER LEFT (PL5.1.5) at the back of the 150 FEEDER ASSY, shift the HOLDER LEFT in the direction of the arrow to remove 3 hooks.
6) Remove the HOLDER LEFT from the SUPPORT NUDGER (PL5.1.4). At the same time, the ACTUATOR NO PAPER (PL5.1.6) is removed.

Replacement

1) Install the HOLDER LEFT (PL5.1.5) and ACTUATOR NO PAPER (PL5.1.6) to the SUPPORT NUDGER (PL5.1.4).

NOTE **Be sure to install the shafts on both ends of the ACTUATOR NO PAPER into the HOLDER LEFT and SUPPORT NUDGER.**

NOTE **Assemble the hook of the ACTUATOR NO PAPER to the HOLDER LEFT as shown in the figure.**

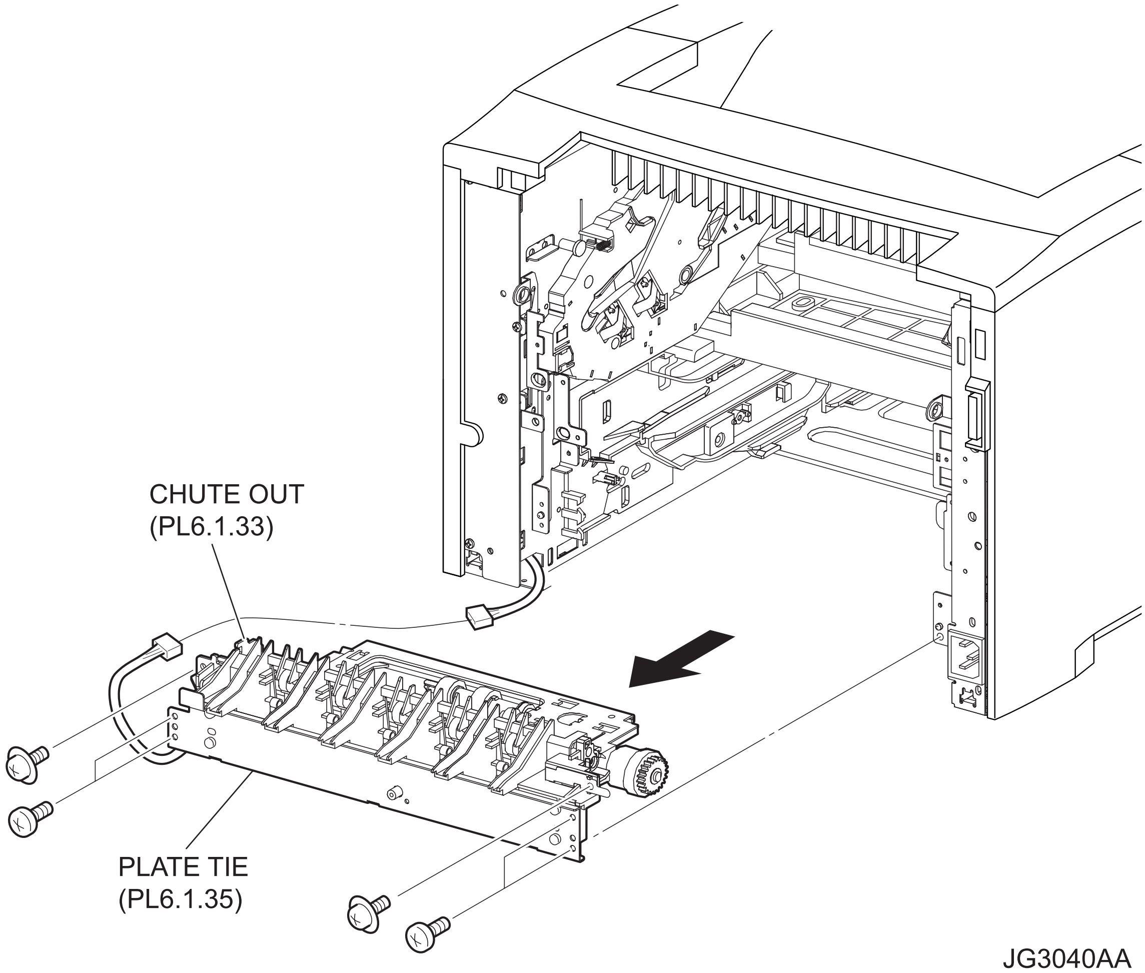
2) Move the HOLDER LEFT (PL5.1.5) in the opposite direction of the arrow, and secure it to the 150 FEEDER ASSY withwithwith 3 hooks.

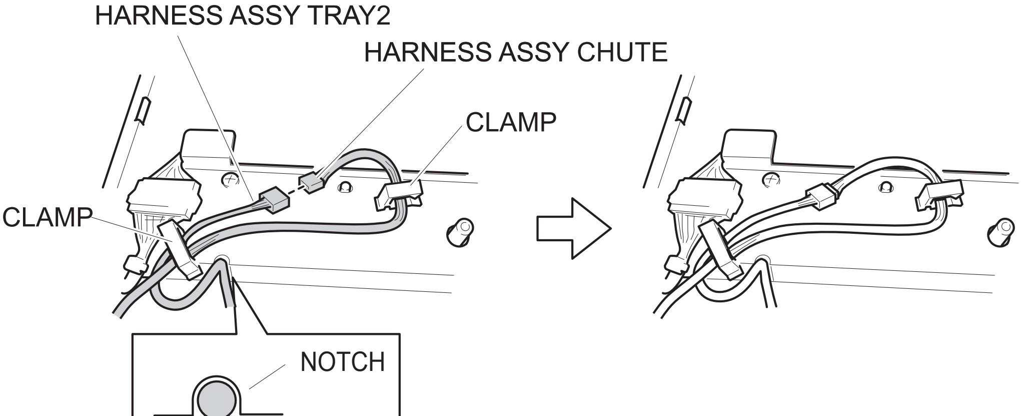
NOTE **After installing, move the ACTUATOR NO PAPER with a finger, and make sure that the ACTUATOR NO PAPER operates smoothly.**

3) Return the printer to the normal use state.
4) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
5) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/PL9.1.12). (RRP10.9/9.4)

RRP6. 250 Paper Feeder (24PPM)

RRP6.1 250 FEEDER ASSY (PL6.1.11)


CHUTE OUT
(PL6.1.33)
PLATE TIE
(PL6.1.35)
JG3040AA


HARNESS ASSY TRAY2
HARNESS ASSY CHUTE
CLAMP
CLAMP
NOTCH
JG3114AA

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Remove the FAN MAIN (PL12.1.10). (RRP12.6)
5) Remove the CHUTE TRANSFER (PL8.1.22) together with the BTR ASSY. (RRP8.11)
6) Remove the 150 FEEDER ASSY (PL5.1.1). (RRP5.1)
7) Disconnect the connector (P/J248) of the HARNESS ASSY TRAY 2 (PL6.1.36) from the HARNESS ASSY CHUTE (PL12.1.17).
8) Release the holdings of the harness from 2 clampers on the PLATE TIE (PL6.1.35).
9) Remove the 4 screws (silver, 6mm) securing the PLATE TIE to the frame.
10) Remove the 2 screws (silver with flange, 8mm) securing the CHUTE OUT (PL6.1.33) to the frame.
11) Remove the 250 FEEDER ASSY from the frame.

Replacement

1) Install the 250 FEEDER ASSY.
2) Secure the CHUTE OUT (PL6.1.33) to the frame using the 2 screws (silver with flange, 8mm).

NOTE **One of the screws that secure the CHUTE OUT to the frame is tightened together with the SPRING EARTH (PL6.1.32).**

3) Install the PLATE TIE (PL6.1.35) to the frame using the 4 screws (silver, 6mm).
4) Secure the harness using the 2 clampers on the PLATE TIE. (Refer to figures.)

NOTE **When installing, put the HARNESS ASSY TRAY 2 into the notch on the PLATE TIE, and arrange it as shown in the figure.**

5) Connect the connector (P/J248) of the HARNESS ASSY TRAY 2 (PL6.1.36) to the HARNESS ASSY CHUTE (PL12.1.17).
6) Install the 150 FEEDER ASSY (PL5.1.1). (RRP5.1)
7) Install the CHUTE TRANSFER (PL8.1.22) together with the BTR ASSY. (RRP8.11)

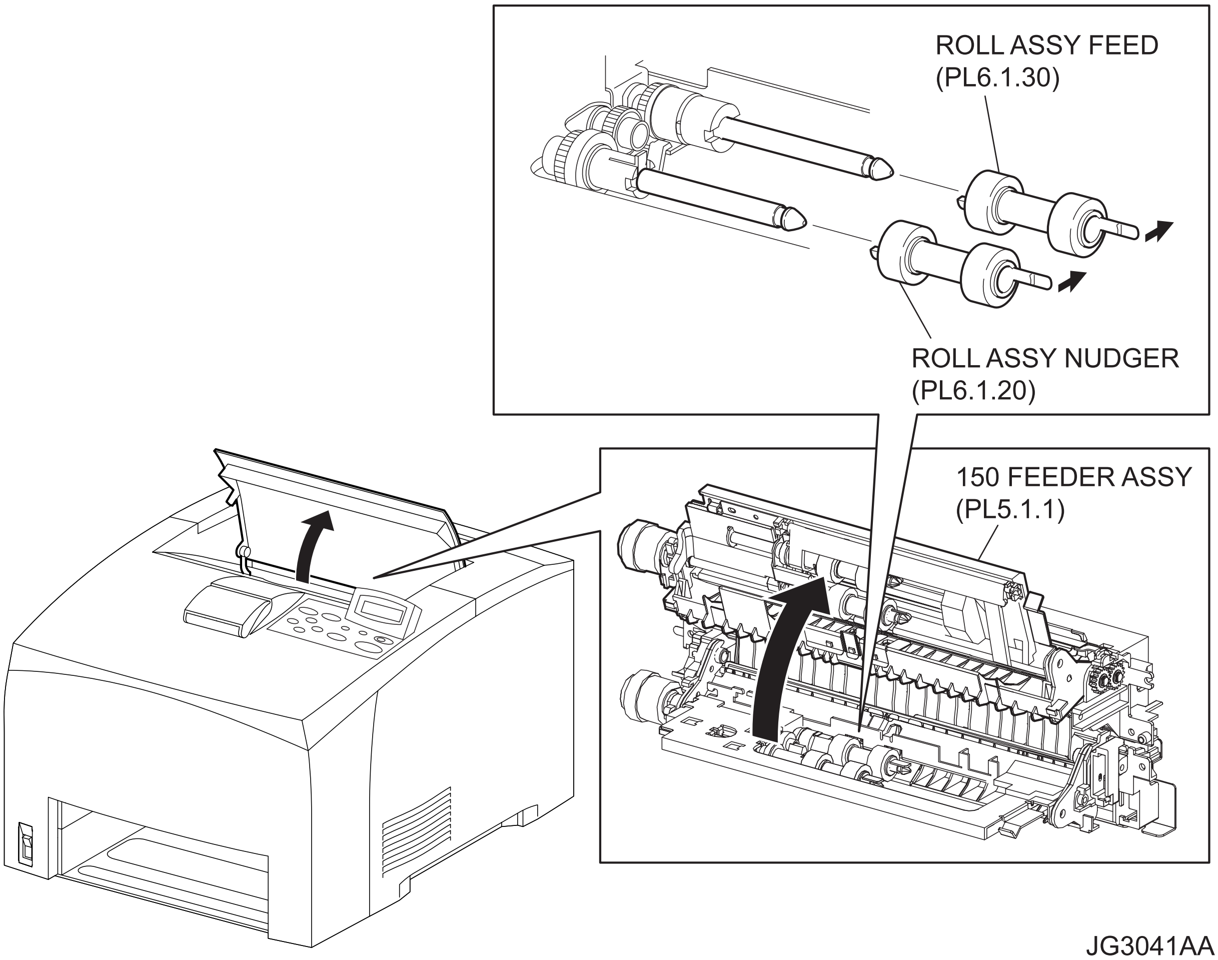
NOTE **Do not tighten the screw to the left side hole of the CHUTE TRANSFER.**

8) Install the FAN MAIN (PL12.1.10). (RRP12.6)
9) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
10) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

11) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)

RRP6.2 ROLL ASSY NUDGER (PL6.1.20), ROLL ASSY FEED (PL6.1.30)


ROLL ASSY FEED
(PL6.1.30)
ROLL ASSY NUDGER
(PL6.1.20)
150 FEEDER ASSY
(PL5.1.1)

JG3041AA

Removal

1) Open the COVER OPEN (PL1.1.2) so that the removing operation can be checked visually.
2) Remove the Paper Cassettes of Tray 1 and Tray 2.
3) Lift up the 150 FEEDER ASSY (PL5.1.1).

NOTE **Althrough the 150 FEEDER ASSY clicks into midway when lifted up, push it a little bit further.**

4) While holding the 150 FEEDER ASSY, release the hook securing the ROLL ASSY NUDGER b y hand which is inserted from the space left by the Paper Cassettes, and pull it out from the SHAFT NUDGER (PL6.1.18).
5) Release the hook securing the ROLL ASSY FEED by using trhe same procedures of step 4 above, and pull it out from the SHAFT FEED (PL6.1.27).

NOTE **When removing, do not hold the rubber rollers of the ROLL ASSY NUDGER and ROLL ASSY FEED.**

Replacement

1) While holding the 150 FEEDER ASSY, install the ROLL ASSY FEED to the SHFT FEED (PL6.1.27), and secure the ROLL ASSY FEED with the hook by using the same procedures of step 4 of removal.

NOTE **Be sure to install the hook of the ROLL ASSY FEED into the groove of the SHAFT FEED.**

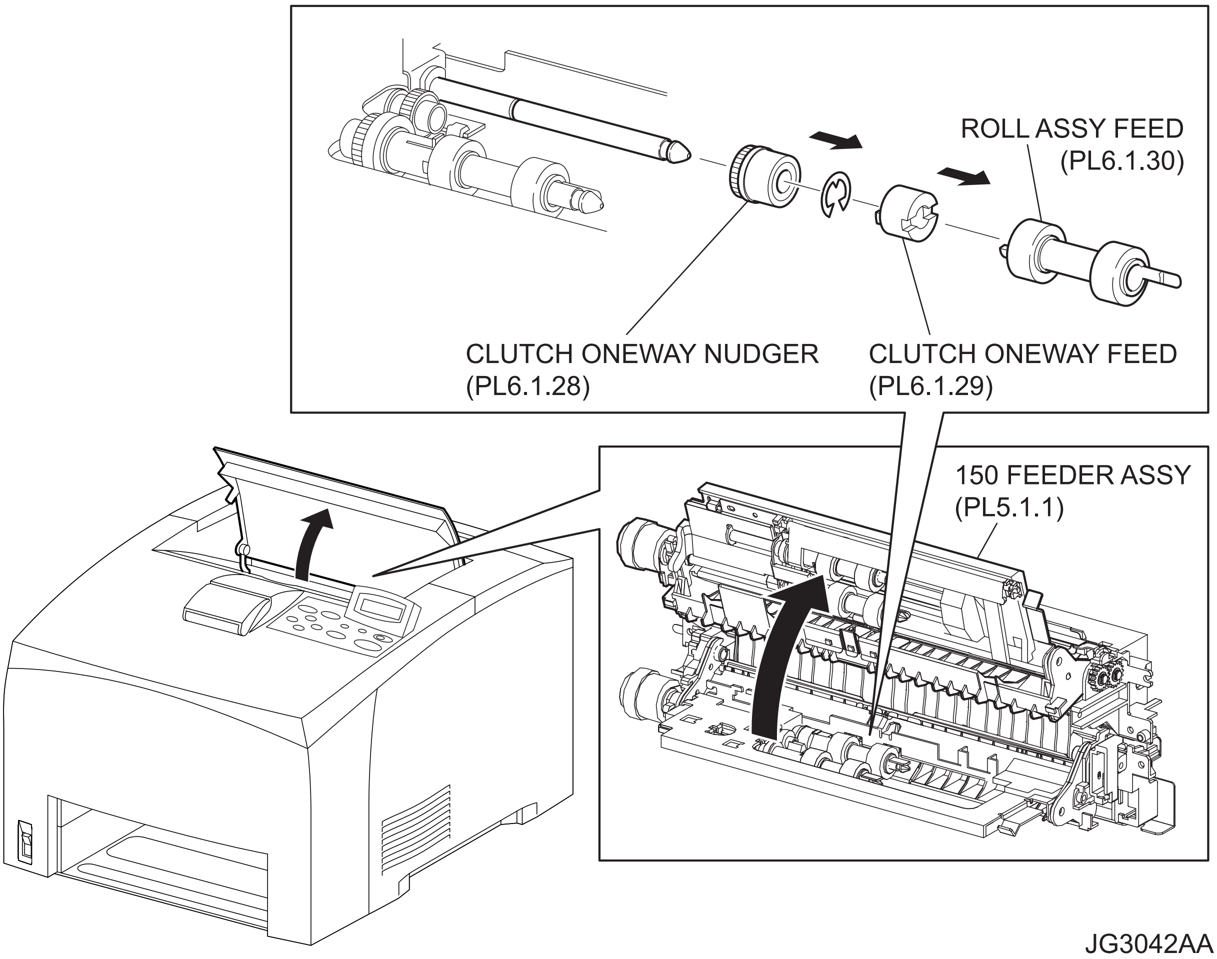
NOTE **When installing, do not hold the rubber rollers of the ROLL ASSY NUDGER and ROLL ASSY FEED.**

2) Install the ROLL ASSY NUDGER to the SHFT NUDGER (PL6.1.18), and secure the ROLL ASSY NUDGER with the hook.

NOTE **Be sure to install the hook of the ROLL ASSY NUDGER into the groove of the SHAFT NUDGER.**

3) Press the 150 FEEDER ASSY (PL5.1.1) down so that it returns to the original position.
4) Install the Paper Cassettes to the Tray 1 and Tray 2.
5) Close the COVER OPEN (PL1.1.2).

RRP6.3 CLUTCH ONEWAY NUDGER (PL6.1.28)


ROLL ASSY FEED
(PL6.1.30)
CLUTCH ONEWAY NUDGER
(PL6.1.28)
CLUTCH ONEWAY FEED
(PL6.1.29)
150 FEEDER ASSY
(PL5.1.1)

JG3042AA

Removal

1) Open the COVER OPEN (PL1.1.2) so that the removing operation can be checked visually.
2) Remove the Paper Cassettes of the Tray 1 and Tray 2.
3) Lift up the 150 FEEDER ASSY (PL5.1.1).

NOTE **Althrough the 150 FEEDER ASSY clicks into midway when lifted up, push it a little bit further.**

4) While holding the 150 FEEDER ASSY, remove the ROLL ASSY FEED (PL6.1.30) with hand which is inserted through the space left by the Paper Cassettes. (RRP6.2)

NOTE **When removing, do not hold the rubber rollers of the ROLL ASSY FEED.**

5) Pull out the CLUTCH ONEWAY FEED (PL6.1.29) from the SHAFT FEED (PL6.1.27).
6) Remove the E-ring securing the CLUTCH ONEWAY NUDGER to the SHAFT FEED.
7) Pull out the CLUTCH ONEWAY NUDGER from the SHAFT FEED.

Replacement

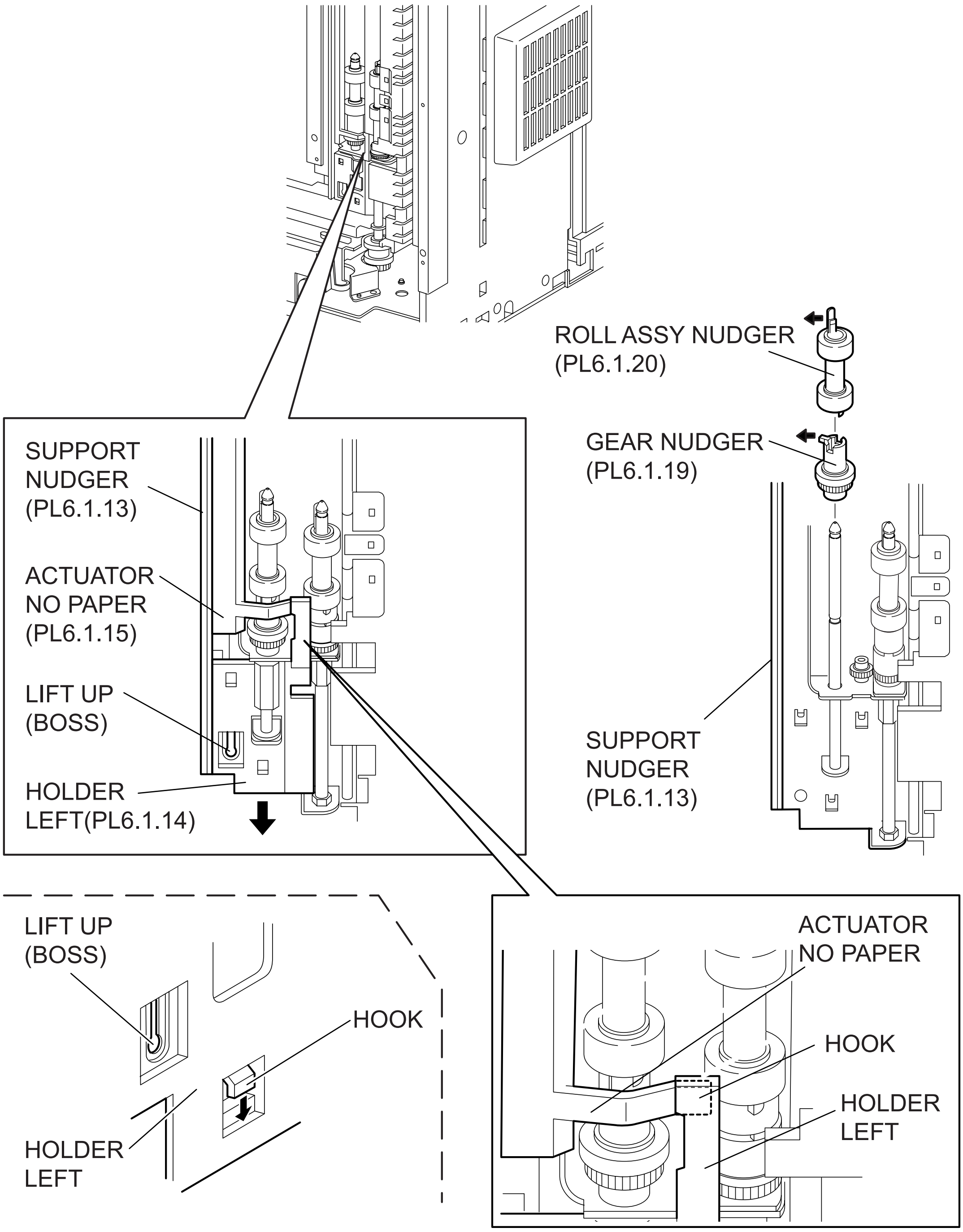
1) Install the CLUTCH ONEWAY NUDGER (PL6.1.28) to the SHAFT FEED (PL6.1.27), and secure it using the E-ring.
2) Install the CLUTCH ONEWAY FEED (PL6.1.29) to the SHAFT FEED.
3) Install the ROLL ASSY FEED (PL6.1.30) to the SHAFT FEED, and secure it with the hook. (RRP6.2)

NOTE **Be sure to install the hook of the ROLL ASSY FEED into the groove of the SHAFT FEED.**

NOTE **When installing, do not hold the rubber rollers of the ROLL ASSY FEED.**

4) Press the 150 FEEDER ASSY (PL5.1.1) down so that it returns to the original position.
5) Close the COVER OPEN (PL1.1.2).

RRP6.4 GEAR NUDGER (PL6.1.19)


ROLL ASSY NUDGER
(PL6.1.20)
GEAR NUDGER
(PL6.1.19)
SUPPORT
NUDGER
(PL6.1.13)
SUPPORT
NUDGER
(PL6.1.13)
ACTUATOR
NO PAPER
(PL6.1.15)
LIFT UP
(BOSS)
HOLDER
LEFT(PL6.1.14)
LIFT UP
(BOSS)
HOOK
HOLDER
LEFT
ACTUATOR
NO PAPER
HOOK
HOLDER
LEFT
JG3043AA

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
2) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
3) Place the printer down on its left side.

NOTE **Be careful not to scratch the cover, and do not given a shock to the printer from a top.**

4) Open the COVER OPEN (PL1.1.2).
5) While lifting up the boss of the HOLDER LEFT (PL6.1.14) at the back of the 250 FEEDER ASSY, shift the HOLDER LEFT in the direction of the arrow to remove 3 hooks.
6) Remove the HOLDER LEFT from the SUPPORT NUDGER (PL6.1.13). At the same time, the ACTUATOR NO PAPER (PL6.1.15) is removed.
7) Release the hook securing the ROLL ASSY NUDGER (PL6.1.20), and pull it out from the SHAFT NUDGER (PL6.1.18).

NOTE **When removing, do not hold the rubber rollers of the ROLL ASSY NUDGER.**

8) Release the hook securing the GEAR NUDGER, and pull it out from the SHAFT NUDGER.

Replacement

1) Install the GEAR NUDGER to the SHAFT NUDGER (PL6.1.18), and secure it with the hook.

NOTE **When installing, do not hold the rubber rollers of the GEAR NUDGER and ROLL ASSY NUDGER.**

NOTE **Be sure to install the hook of the GEAR NUDGER into the groove of the SHAFT NUDGER.**

2) Install the ROLL ASSY NUDGER (PL6.1.20) to the SHAFT NUDGER, and secure it with the hook.

NOTE **Be sure to install the hook of the ROLL ASSY NUDGER into the groove of the SHAFT NUDGER.**

3) Install the HOLDER LEFT (PL6.1.14) and ACTUATOR NO PAPER (PL6.1.15) to the SUPPORT NUDGER (PL6.1.13).

NOTE **Be sure to install the shafts on both ends of the ACTUATOR NO PAPER into the HOLDER LEFT and SUPPORT NUDGER.**

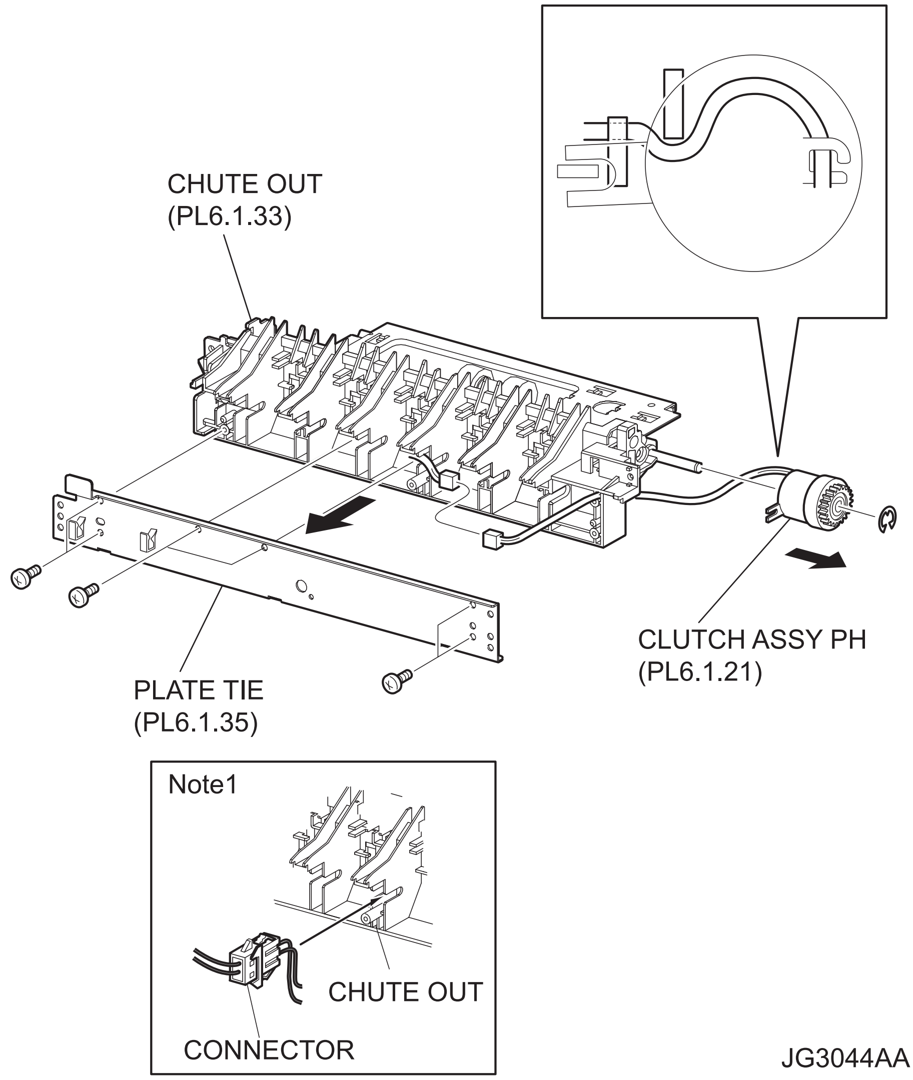
NOTE **Assemble the hook of the ACTUATOR NO PAPER to the HOLDER LEFT as shown in the figure.**

4) Move the HOLDER LEFT in the opposite direction of the arrow, and secure it to the 250 FEEDER ASSY with the 3 hooks.

NOTE **After installing, move the ACTUATOR NO PAPER with a finger, and make sure that the ACTUATOR NO PAPER operates smoothly.**

5) Return the printer to the normal use state.
6) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
7) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)

RRP6.5 CLUTCH ASSY PH (PL6.1.21)


CHUTE OUT
(PL6.1.33)
PLATE TIE
(PL6.1.35)
CLUTCH ASSY PH
(PL6.1.21)
Note1
CHUTE OUT
CONNECTOR
JG3044AA

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
2) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
3) Remove the COVER REAR (PL1.1.3). (RRP1.1)
4) Remove the FAN MAIN (PL12.1.10). (RRP12.6)
5) Remove the CHUTE TRANSFER (PL8.1.22) together with the BTR ASSY. (RRP8.11)
6) Remove the 150 FEEDER ASSY (PL5.1.1). (RRP5.1)
7) Remove the 250 FEEDER ASSY (PL6.1.11). (RRP6.1)
8) Remove the 6 screws (gold tapping, 8mm) securing the PLATE TIE (PL6.1.35) to the CHUTE OUT (PL6.1.33), and remove the PLATE TIE from the CHUTE OUT.
9) Disconnect the connector (P/J247) of the CLUTCH ASSY PH from the HARNESS ASSY TRAY 2 (PL6.1.36).
10) Remove the E-ring securing the CLUTCH ASSY PH, and remove the CLUTCH ASSY PH from the SHAFT FEED (PL6.1.27).

Replacement

1) Install the CLUTCH ASSY PH to the SAHFT FEED (PL6.1.27), and secure it using the E-ring.

NOTE **When installing, make sure that the notch of the CLUTCH ASSY PH is combined with the boss of the CHUTE OUT.**

2) Connect the connector (P/J247) of the CLUTCH ASSY PH to the HARNESS ASSY TRAY 2 (PL6.1.36). After connecting the connector, put the connector into the space between two ribs of the CHUTE OUT.

NOTE **Be careful of the arranging of the harness of the CLUTCH ASSY PH.**

3) Install the PLATE TIE (PL6.1.35) to the CHUTE OUT (PL6.1.33) using the 6 screws (gold tapping, 8mm).
4) Install the 250 FEEDER ASSY (PL6.1.11). (RRP6.1)
5) Install the 150 FEEDER ASSY (PL5.1.1). (RRP5.1)
6) Install the CHUTE TRANSFER (PL8.1.22). (RRP8.11)

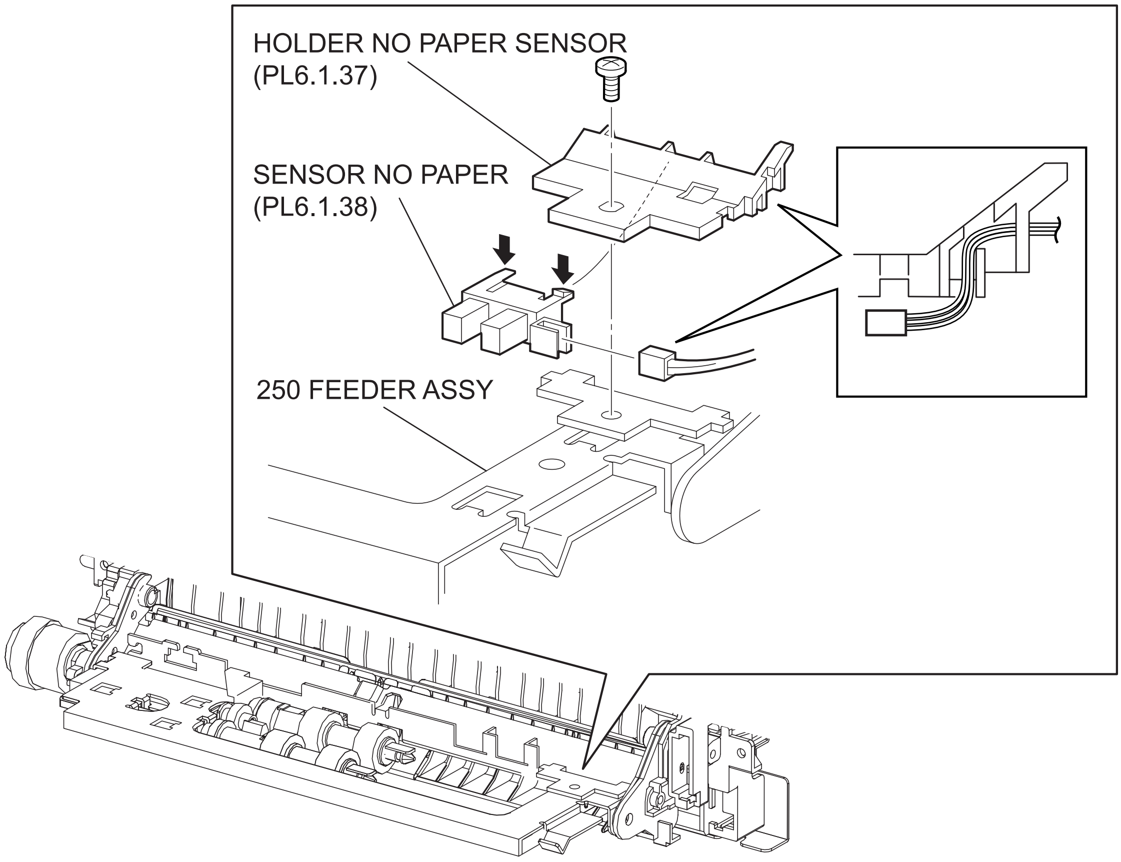
NOTE **Do not tighten the screw to the left side hole of the CHUTE TRANSFER.**

7) Install the FAN MAIN (PL12.1.10). (RRP12.6)
8) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

9) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
10) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)

RRP6.6 SENSOR NO PAPER (PL6.1.38)


HOLDER NO PAPER SENSOR
(PL6.1.37)
SENSOR NO PAPER
(PL6.1.38)
250 FEEDER ASSY

JG3045AA

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
2) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
3) Remove the COVER REAR (PL1.1.3). (RRP1.1)
4) Remove the FAN MAIN (PL12.1.10). (RRP12.6)
5) Remove the CHUTE TRANSFER (PL8.1.22) together with the BTP ASSY. (RRP8.11)
6) Remove the 150 FEEDER ASSY (PL5.1.1). (RRP5.1)
7) Remove the screw (gold, 6mm) securing the HOLDER NO PAPER SENSOR (PL6.1.37).
8) Remove the HOLDER NO PAPER SENSOR from the 250 FEEDER ASSY.
9) Release the hooks securing the SENSOR NO PAPER to the HOLDER NO PAPER SENSOR, and remove the SENSOR NO PAPER.
10) Disconnect the HARNESS ASSY TRAY 2 (PL6.1.36) from the connector (P/J246) of the SENSOR NO PAPER.

Replacement

1) Connect the connector (P/J246) of the HARNESS ASSY TRAY 2 (PL6.1.36) to the connector of the SENSOR NO PAPER.
2) Install the SENSOR NO PAPER to the HOLDER NO PAPER SENSOR (PL6.1.37), and secure it using hooks.
3) Put the wires of the HARNESS ASSY TRAY 2 into the notch of the HOLDER NO PAPER SENSOR as shown in the figure.
4) Install the HOLDER NO PAPER SENSOR to the 250 FEEDER ASSY using the screw (gold, 6mm).

NOTE **After tightening the screw, make sure that the wires of the HARNESS ASSY TRAY 2 have not pinched.**

5) Install the 150 FEEDER ASSY (PL5.1.1). (RRP5.1)
6) Install the CHUTE TRANSFER (PL8.1.22) together with the BTR ASSY. (RRP8.11)

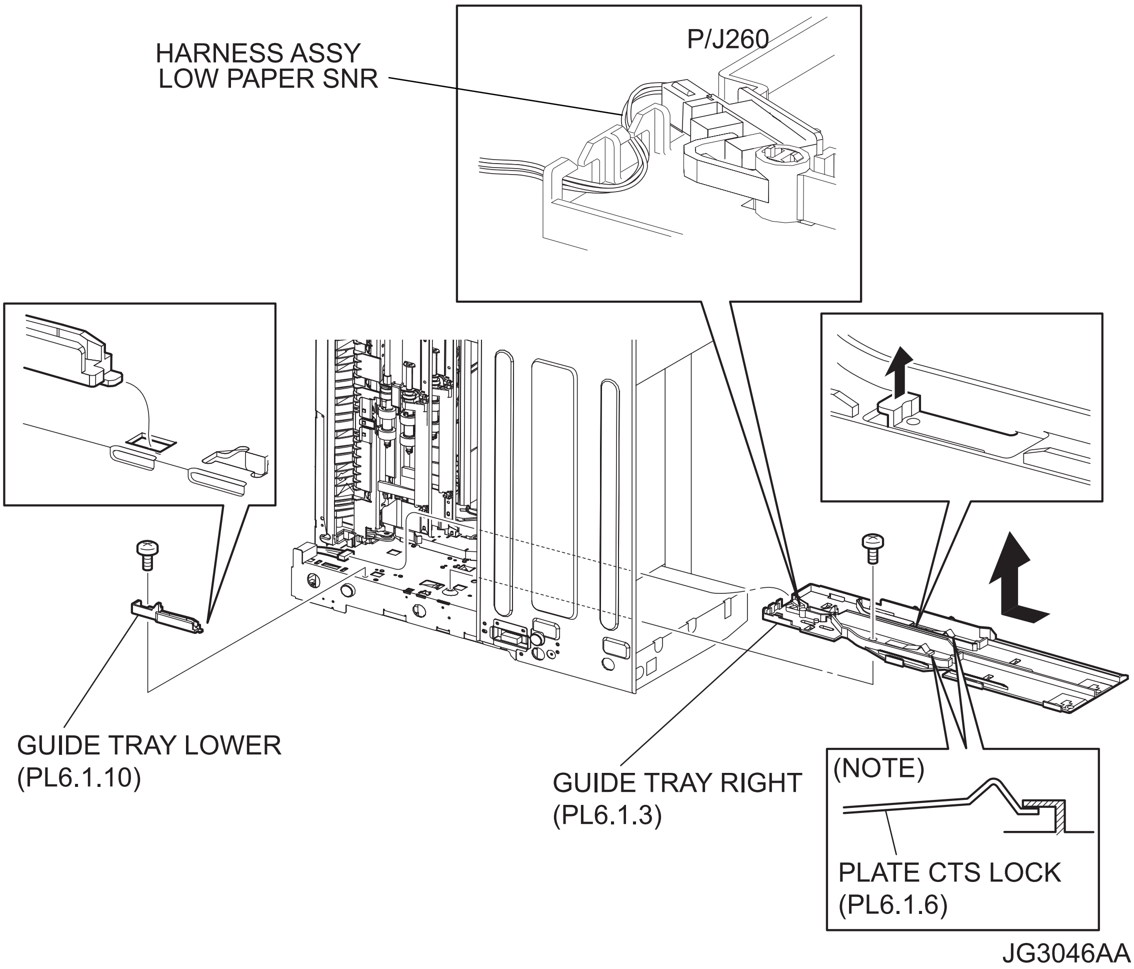
NOTE **Do not tighten the screw to the left side hole of the CHUTE TRANSFER.**

7) Install the FAN MAIN (PL12.1.10). (RRP12.6)
8) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

9) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
10) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)

RRP6.7   GUIDE TRAY RIGHT (PL6.1.3)


HARNESS ASSY
LOW PAPER SNR
P/J260
GUIDE TRAY LOWER
(PL6.1.10)
GUIDE TRAY RIGHT
(PL6.1.3)
(NOTE)
PLATE CTS LOCK
(PL6.1.6)
JG3046AA

Removal

1) Rewmove the EP CARTRIDGE and Paper Cassettes.
2) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
3) Remove the COVER REAR (PL1.1.3). (RRP1.1)
4) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
5) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
6) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
7) Remove the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
8) Remove the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
9) Remove the COVER TOP (PL1.1.7). (RRP1.4)
10) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
11) Place the printer down on its right side.
12) Remove the screw (silver, 6mm) securing the GUIDE TRAY LOWER (PL6.1.10) to the frame.
13) Release the hook of the GUIDE TRAY LOWER from the hole on the frame, and remove the GUIDE TRAY LOWER.
14) Disconnect the connector (P/J260) of the HARNESS ASSY LOW PAPER SNR from the GUIDE TRAY RIGHT.
15) Remove the screw (silver, 6mm) securing the GUIDE TRAY RIGHT to the frame.
16) Lift up the hook of the GUIDE TRAY RIGHT, and shift it in the direction of the arrow. Then, remove the GUIDE TRAY RIGHT from the frame.

Replacement

1) Shift the GUIDE TRAY RIGHT in the opposite direction of the arrow to install it to the frame, and secure it using the screw (silver, 6mm).

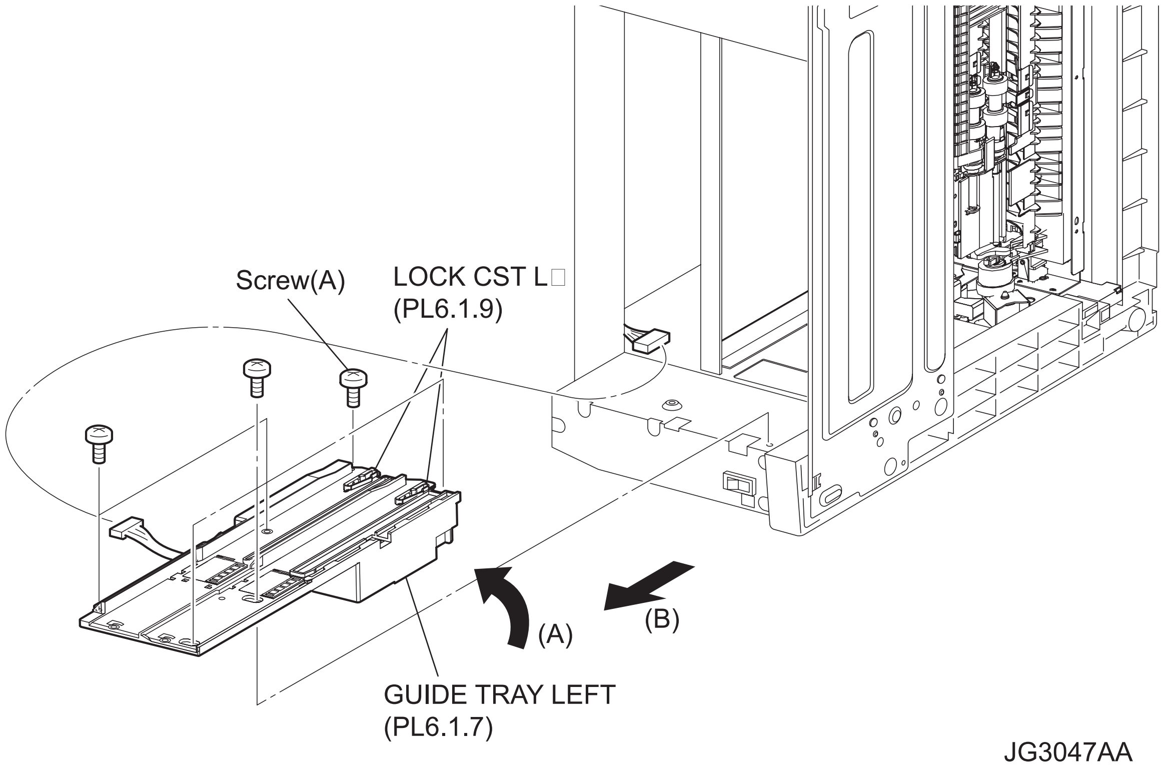
NOTE **When installing the GUIDE TRAY RIGHT, make sure the installing position of the PLATE CST LOCK (PL6.1.6) is in the position shown in the figure, NOTE.**

2) Connect the connector (P/J260) of the HARNESS ASSY LOW PAPER SNR to the GUIDE TRAY RIGHT.
3) Put the hook of the GUIDE TRAY LOWER (PL6.1.10) into the hole of the frame, and secure it using the screw (silver, 6mm).
4) Return the printer to the normal use state.
5) Install the COVER FRONT (PL1.1.5). (RRP1.5)
6) Install the COVER TOP (PL1.1.7). (RRP1.4)
7) Install the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
8) Install the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
9) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
10) Install the COVER LEFT (PL1.1.6). (RRP1.3)
11) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
12) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

13) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)
14) Install the EP CARTRIDGE and Paper Cassettes.

RRP6.8   GUIDE TRAY LEFT (PL6.1.7)


Screw(A)
LOCK CST L□
(PL6.1.9)
(A)
(B)
GUIDE TRAY LEFT
(PL6.1.7)
JG3047AA

Removal

1) Remove the EP CARTRIDGE and Paper Cassettes.
2) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
3) Remove the COVER REAR (PL1.1.3). (RRP1.1)
4) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
5) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
6) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
7) Remove the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
8) Remove the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
9) Remove the COVER TOP (PL1.1.7). (RRP1.4)
10) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
11) Place the printer down on its left side.
12) Disconnect the connector (P/J1821) of the GUIDE TRAY LEFT from the HARNESS ASSY LVPS (PL12.1.1).
13) Remove the 6 screws (gold tapping, 8mm x 1, silver, 6mm x 5) securing the GUIDE TRAY LEFT to the frame.
14) Shift the GUIDE TRAY LEFT in the direction of the arrows (A) and (B), and remove it from the frame.

Replacement

1) Shift the GUIDE TRAY LEFT in the opposite direction of the arrows (A) and (B), and install it to the frame.
2) Install the GUIDE TRAY LEFT using the 6 screws (gold tapping, 8mm x 1, silver, 6mm x 5).

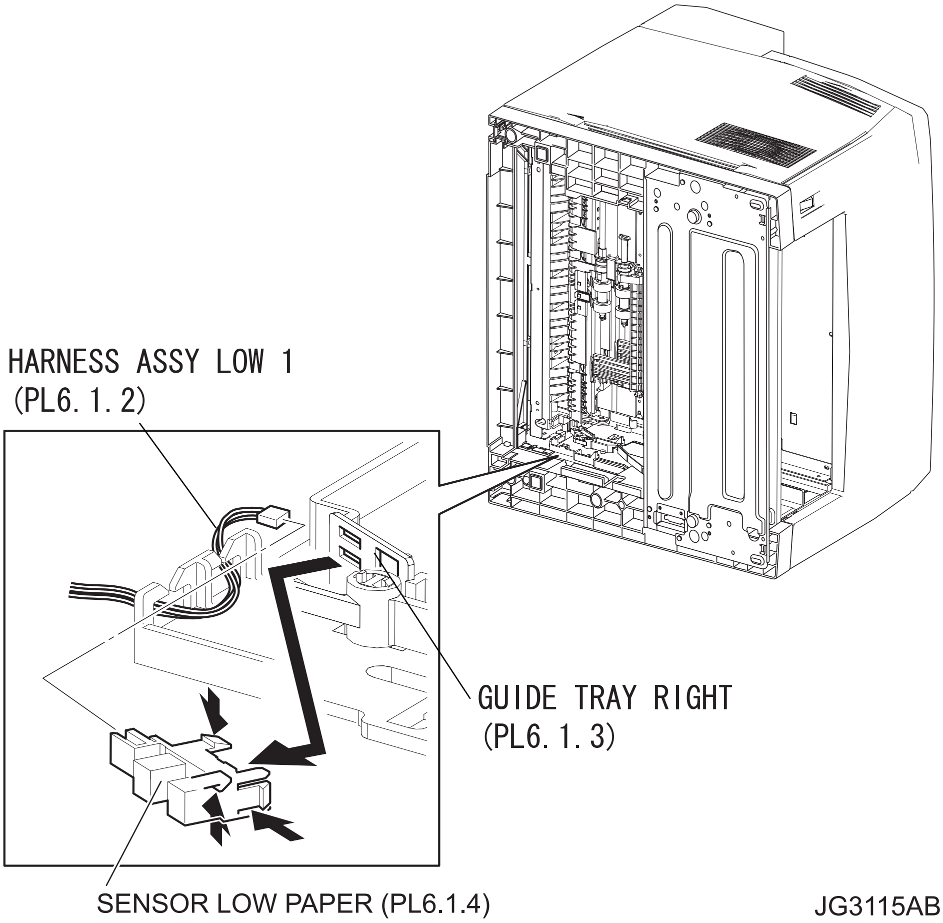
NOTE **Be sure to tighten the screw (gold tapping, 8mm) shown as “Screw (A)” in the figure.**

3) Connect the connector (P/J1821) of the GUIDE TRAY LEFT to the HARNESS ASSY LVPS (PL12.1.1).
4) Return the printer to the normal use state.
5) Install the COVER FRONT (PL1.1.5). (RRP1.5)
6) Install the COVER TOP (PL1.1.7). (RRP1.4)
7) Install the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
8) Install the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
9) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
10) Install the COVER LEFT (PL1.1.6). (RRP1.3)
11) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
12) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

13) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)
14) Install the EP CARTRIDGE and Paper Cassettes

RRP6.9 SENSOR LOW PAPER (PL6.1.4)


HARNESS ASSY LOW 1
(PL6.1.2)
GUIDE TRAY RIGHT
(PL6.1.3)
SENSOR LOW PAPER (PL6.1.4)
JG3115AB

Removal

1) Remove the EP CARTRIDGE and Paper Cassettes.
2) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Place the printer down on its right side.

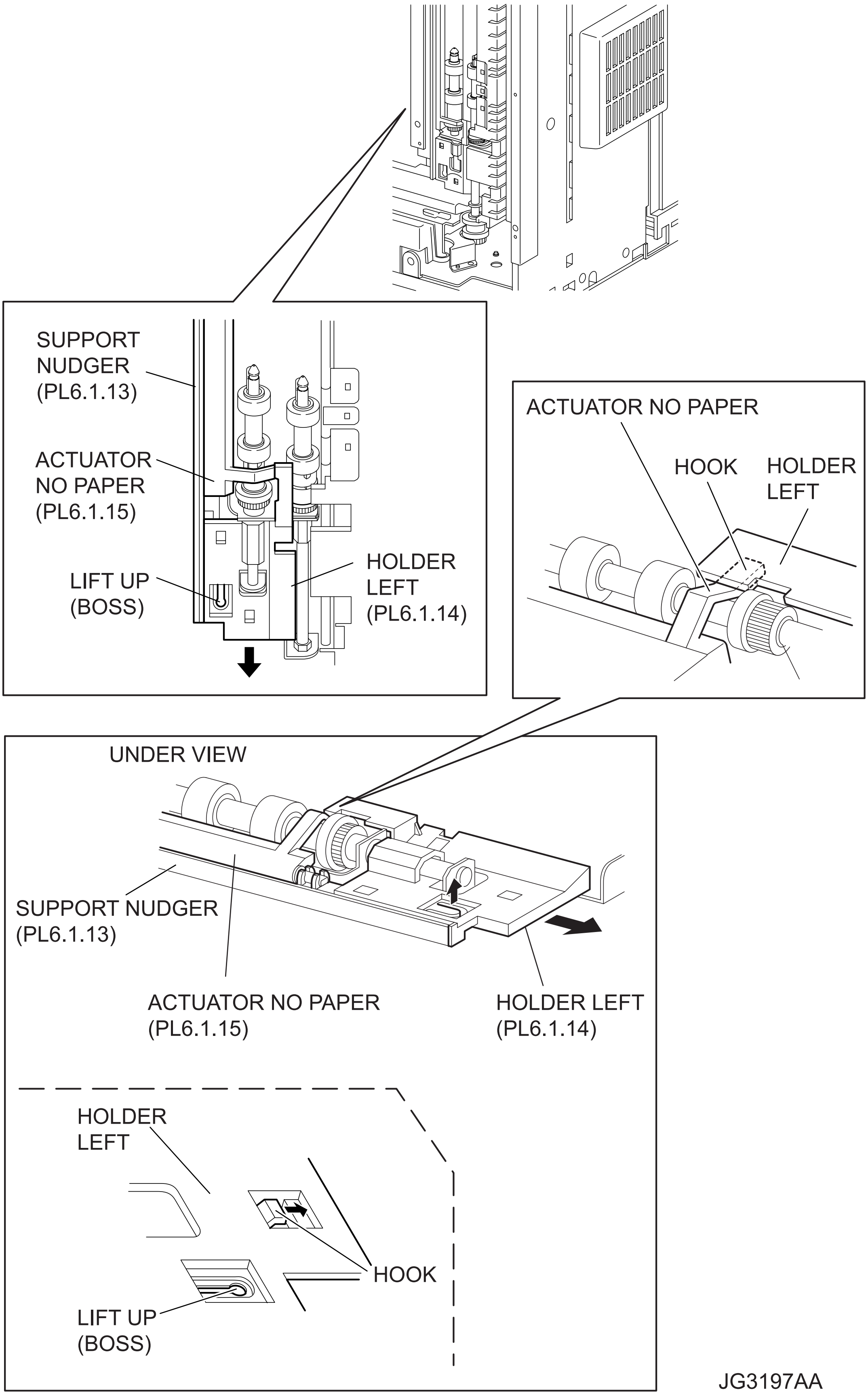
NOTE **Be careful not to scratch the cover, and do not given a shock to the printer from a top.**

5) Disconnect the connector (P/J260) of the HARNESS ASSY LOW 1 (PL7.1.2) from the SENSOR.
6) Release the hooks of the SENSOR, and remove it from the GUIDE TRAY RIGHT (PL7.1.3).

Replacement

1) Install the SENSOR LOE PAPER to the GUIDE TRAY RIGHT (PL7.1.3), and secure it with hooks.
2) Connect the connector (P/J260) of the HARNESS ASSY LOW 1 (PL7.1.2) to the SENSOR.
3) Return the printer to the normal use state.
4) Install the FUSER ASSSY (PL8.1.20). (RRP8.8)
5) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)
6) Install the EP CARTRIDGE and Paper Cassettes.

RRP6.10 ACTUATOR NO PAPER (PL6.1.15)


SUPPORT NUDGER (PL6.1.13)
ACTUATOR NO PAPER (PL6.1.15)
LIFT UP (BOSS)
HOLDER LEFT (PL6.1.14)
ACTUATOR NO PAPER
HOOK
HOLDER LEFT
UNDER VIEW
SUPPORT NUDGER (PL6.1.13)
ACTUATOR NO PAPER (PL6.1.15)
HOLDER LEFT (PL6.1.14)
HOLDER LEFT
HOOK
LIFT UP (BOSS)
JG3197AA

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
2) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
3) Place the printer down on its left side.

NOTE **Be careful not to scratch the cover, and do not given a shock to the printer from a top.**

4) Open the COVER OPEN (PL1.1.2).
5) While lifting up the boss of the HOLDER LEFT (PL6.1.14) at the back of the 250 FEEDER ASSY, shift the HOLDER LEFT in the direction of the arrow to remove 3 hooks.
6) Remove the HOLDER LEFT from the SUPPORT NUDGER (PL6.1.13). At the same time, the ACTUATOR NO PAPER (PL6.1.15) is removed.

Replacement

1) Install the HOLDER LEFT (PL6.1.14) and ACTUATOR NO PAPER (PL6.1.15) to the SUPPORT NUDGER (PL6.1.13).

NOTE **Be sure to install the shafts on both ends of the ACTUATOR NO PAPER into the HOLDER LEFT and SUPPORT NUDGER.**

NOTE **Assemble the hook of the ACTUATOR NO PAPER to the HOLDER LEFT as shown in the figure.**

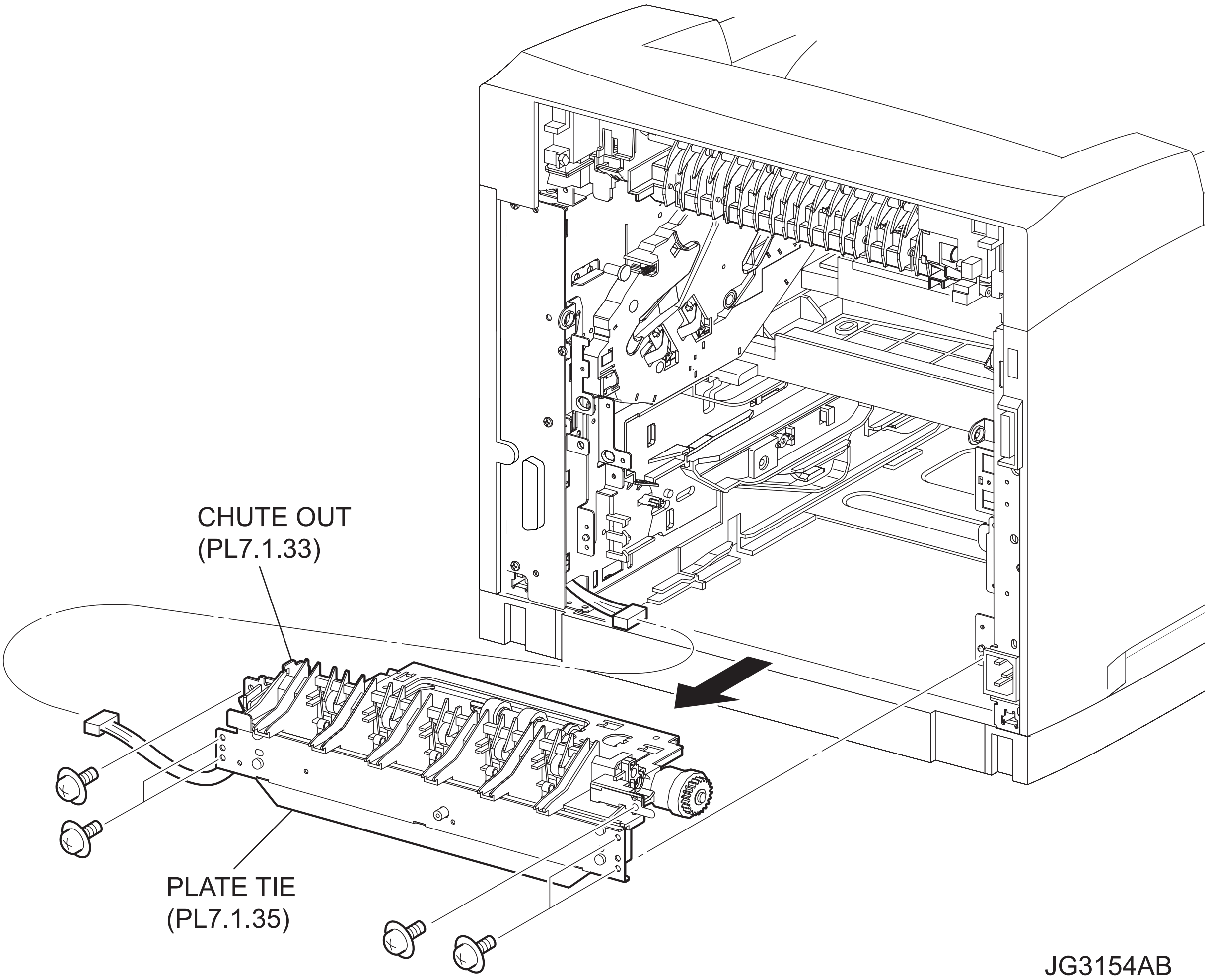
2) Move the HOLDER LEFT in the opposite direction of the arrow, and secure it to the 250 FEEDER ASSY with the 3 hooks.

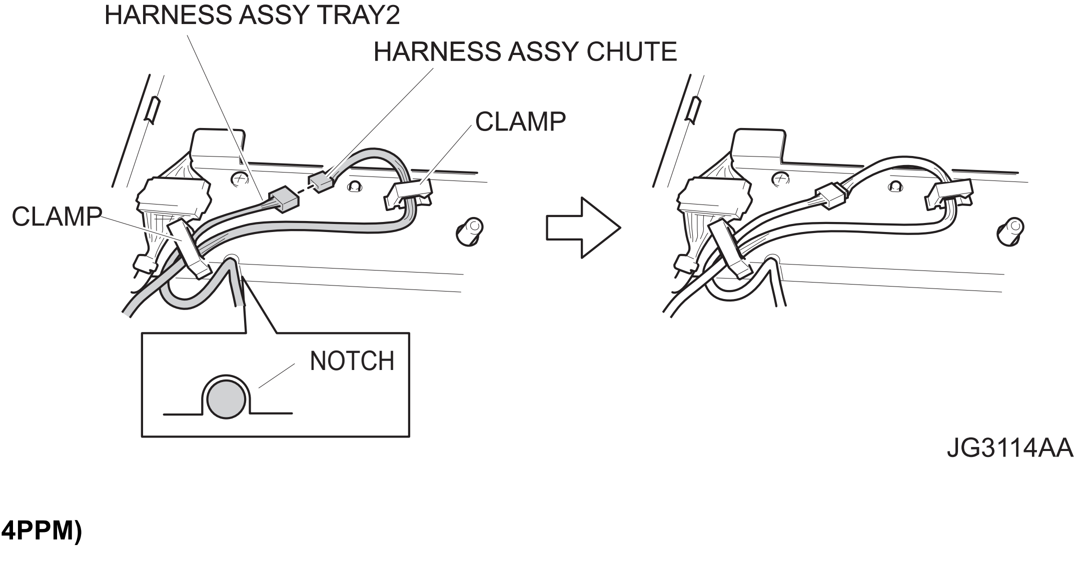
NOTE **After installing, move the ACTUATOR NO PAPER with a finger, and make sure that the ACTUATOR NO PAPER operates smoothly.**

3) Return the printer to the normal use state.
4) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
5) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)

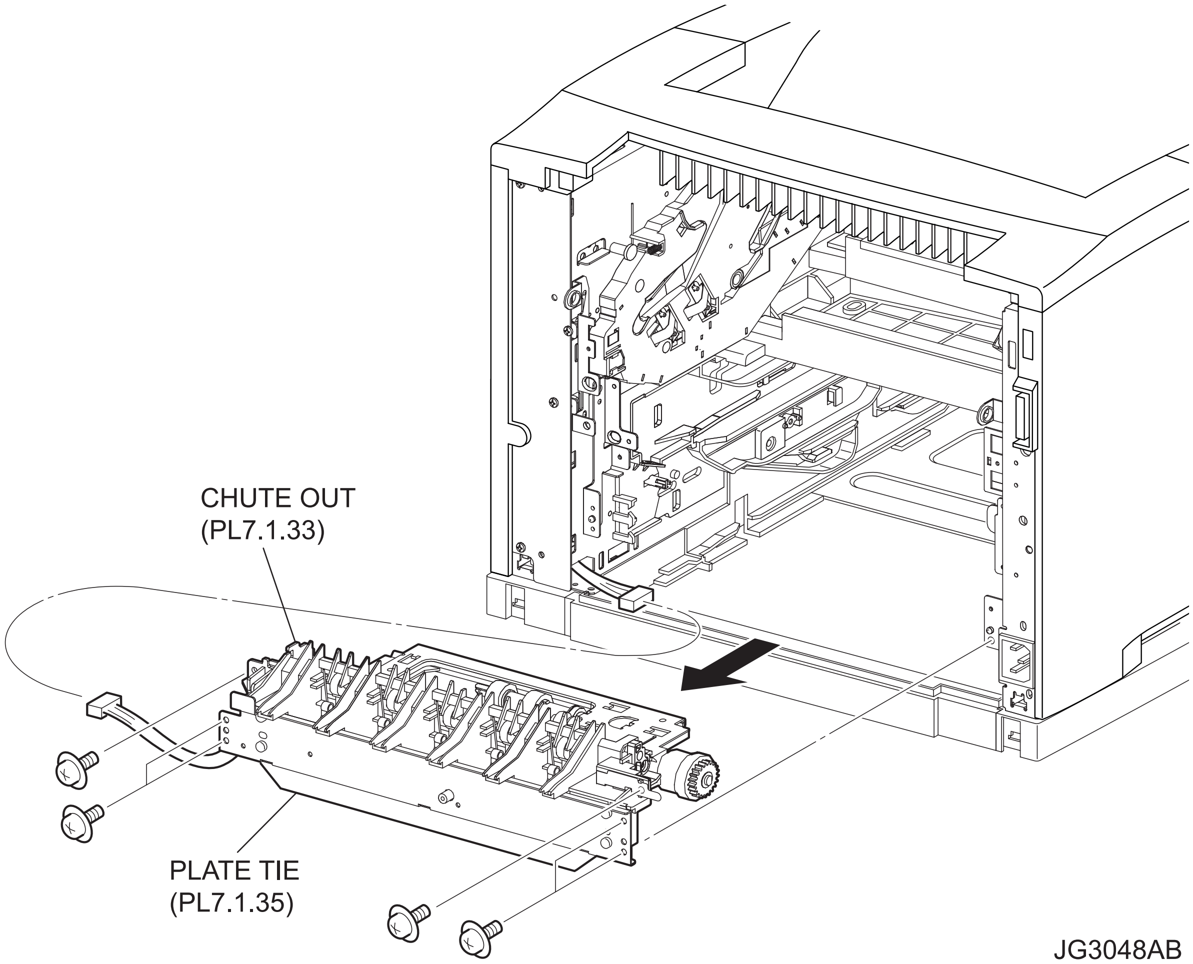
RRP7. 550 Paper Feeder

RRP7.1 550 FEEDER ASSY (PL7.1.10)

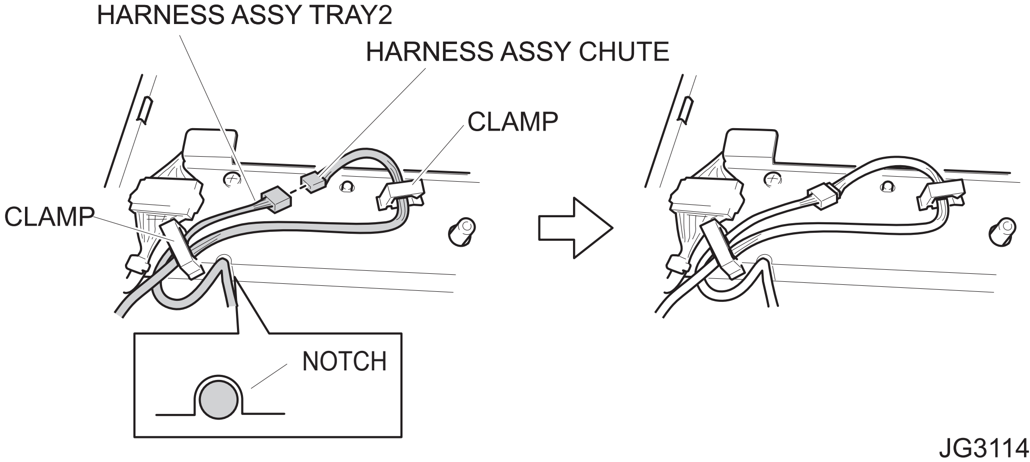

CHUTE OUT
(PL7.1.33)
PLATE TIE
(PL7.1.35)
JG3154AB


HARNESS ASSY TRAY2
HARNESS ASSY CHUTE
CLAMP
CLAMP
NOTCH
JG3114AA

(34PPM)


CHUTE OUT
(PL7.1.33)
PLATE TIE
(PL7.1.35)

JG3048AB


HARNESS ASSY TRAY2
HARNESS ASSY CHUTE
CLAMP
CLAMP
NOTCH

JG3114AA

(24PPM)

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
2) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
3) Remove the COVER REAR (PL1.1.3). (RRP1.1)
4) Remove the FAN MAIN (PL12.1.10). (RRP12.6)
5) Remove the CHUTE TRANSFER (PL8.1.22) together with the BTR ASSY. (RRP8.11)
6) Remove the 150 FEEDER ASSY (PL5.1.1). (RRP5.1)
7) Disconnect the connector (P/J248) of the HARNESS ASSY TRAY 2 (PL7.1.36) from the HARNESS ASSY CHUTE (PL12.1.17).
8) Release the holdings of the harness from 2 clampers on the PLATE TIE (PL7.1.35).
9) Remove the 4 screws (silver with flange, and spring washer 8mm) securing the PLATE TIE to the frame.
10) Remove the 2 screws (silver with flange, and spring washer 8mm) securing the CHUTE OUT (PL7.1.33) to the frame.
11) Remove the 550 FEEDER ASSY from the frame.

Replacement

1) Install the 550 FEEDER ASSY to the frame.
2) Secure the CHUTE OUT (PL7.1.33) to the frame using the 2 screws (silver with flange, and spring washer 8mm).

NOTE **One of the screws that secure the CHUTE OUT to the frame is tightened together with the SPRING EARTH (PL7.1.31).**

3) Install the PLATE TIE (PL7.1.35) to the frame using the 4 screws (silver with flange, and spring washer 8mm).
4) Secure the harness using the 2 clampers on the PLATE TIE. (Refer to figures.)

NOTE **When installing, put the harness into the notch on the PLATE TIE, and arrange it as shown in the figure.**

5) Connect the connector (P/J248) of the HARNESS ASSY TRAY 2 (PL7.1.36) to the HARNESS ASSY CHUTE (PL12.1.17).
6) Install the 150 FEEDER ASSY (PL5.1.1). (RRP5.1)
7) Install the CHUTE TRANSFER (PL8.1.22) together with the BTR ASSY. (RRP8.11)

NOTE **Do not tighten the screw to the left side hole of the CHUTE TRANSFER.**

8) Install the FAN MAIN (PL12.1.10). (RRP12.6)
9) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

10) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
11) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)

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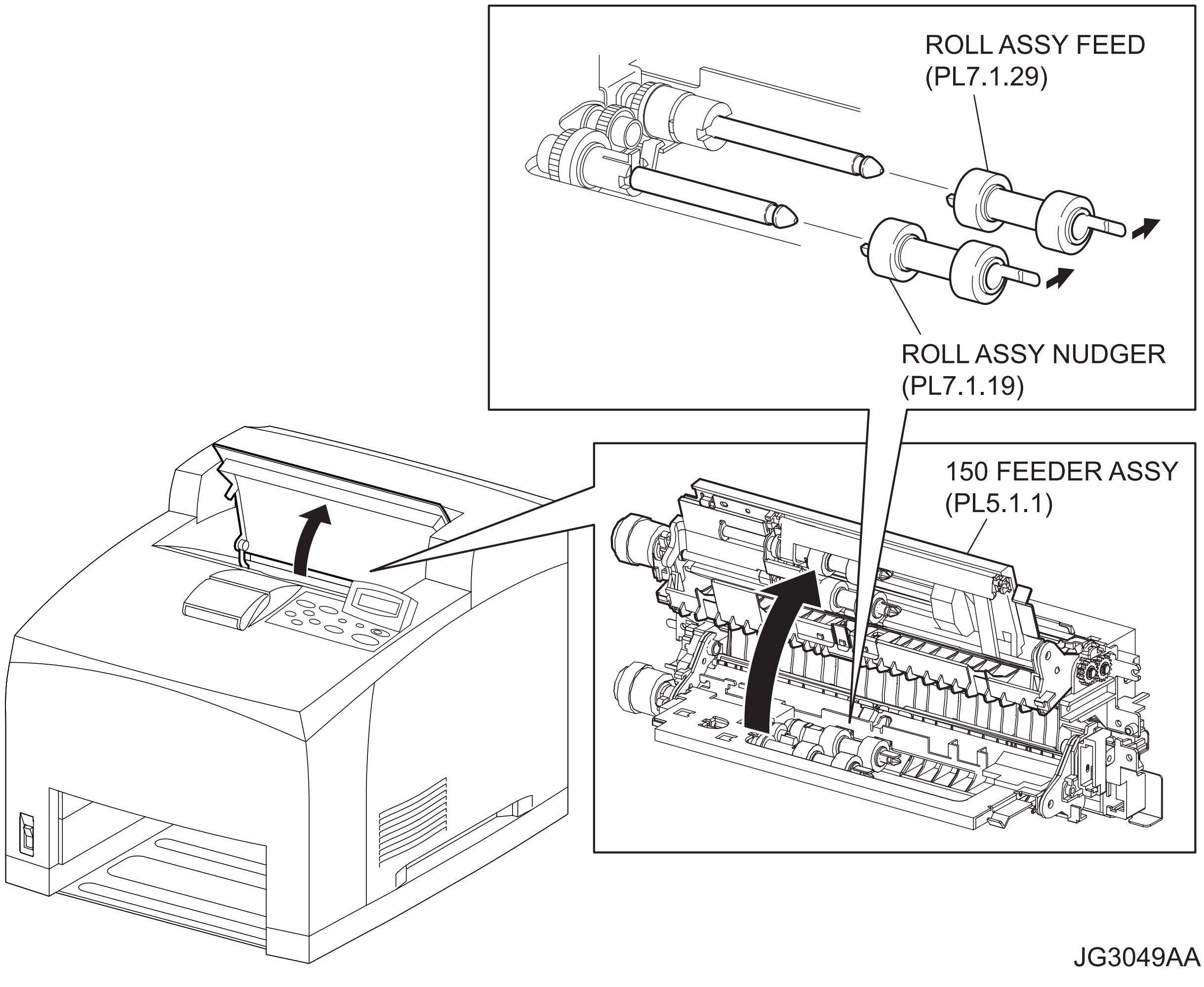
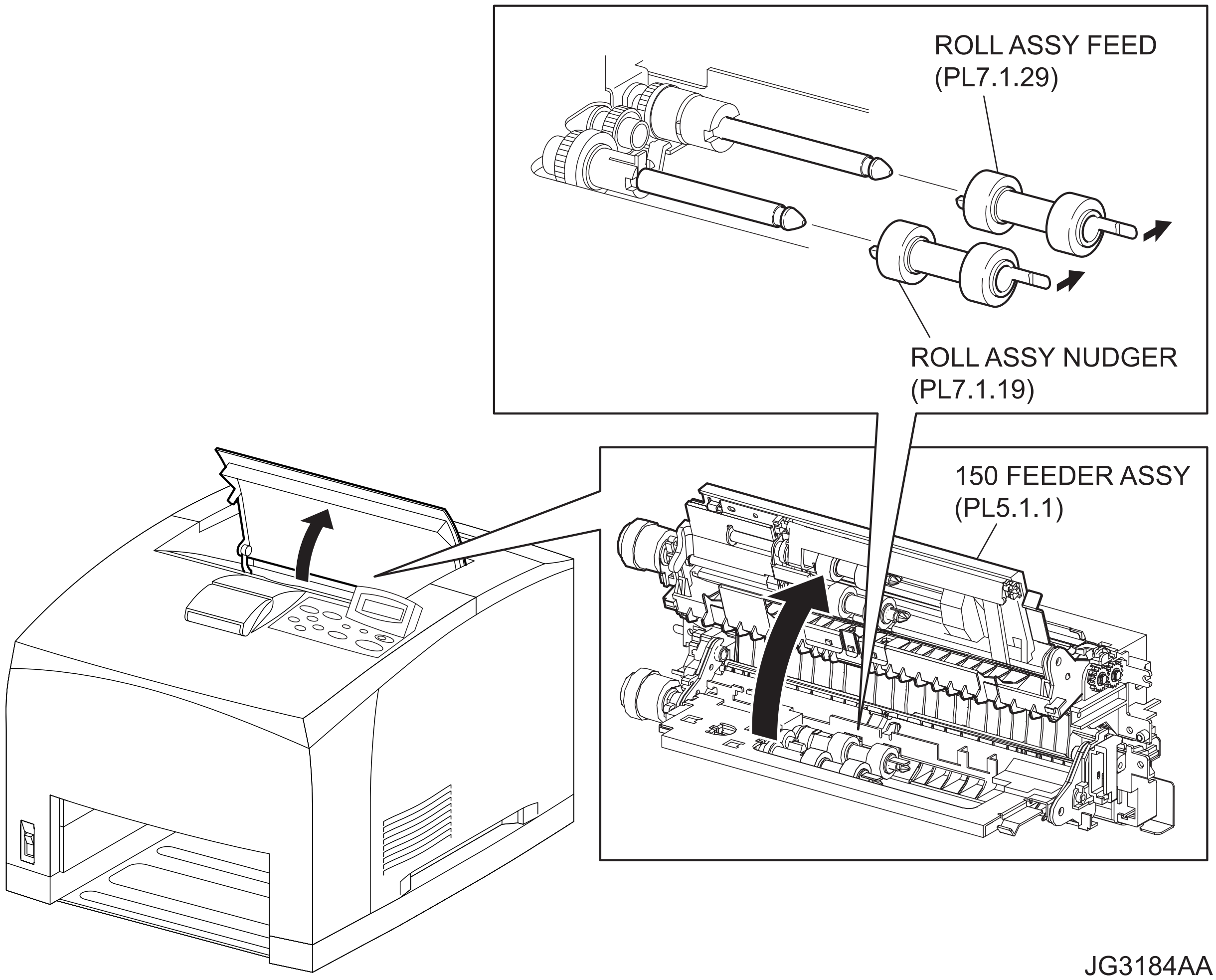
RRP7.2 ROLL ASSY NUDGER (PL7.1.19), ROLL ASSY FEED (PL7.1.29)


ROLL ASSY FEED
(PL7.1.29)
ROLL ASSY NUDGER
(PL7.1.19)
150 FEEDER ASSY
(PL5.1.1)
JG3049AA

(34PPM)


ROLL ASSY FEED
(PL7.1.29)
ROLL ASSY NUDGER
(PL7.1.19)
150 FEEDER ASSY
(PL5.1.1)

JG3184AA

(24PPM)

Removal

1) Open the COVER OPEN (PL1.1.2) so that the removing operation can be checked visually..
2) Remove the Paper Cassettes of the Tray 1 and Tray 2.
3) Lift up the 150 FEEDER ASSY (PL5.1.1).

NOTE **Althrough the 150 FEEDER ASSY clicks into midway when lifted up, push it a little bit further.**

4) While holding the 150 FEEDER ASSY, release the hook securing the ROLL ASSY NUDGER b y hand which is inserted through the space left by the Paper Cassettes, and pull it out from the SHAFT NUDGER (PL7.1.17).
5) Release the hook securing the ROLL ASSY FEED by using trhe same procedures of step 4 above, and pull it out from the SHAFT FEED (PL7.1.26).

NOTE **When removing, do not hold the rubber rollers of the ROLL ASSY NUDGER and ROLL ASSY FEED.**

Replacement

1) While holding the 150 FEEDER ASSY, install the ROLL ASSY FEED to the SHFT FEED (PL7.1.26), and secure the ROLL ASSY FEED with the hook by using the same procedures of step 4 of removal.

NOTE **Be sure to install the hook of the ROLL ASSY FEED into the groove of the SHAFT FEED.**

NOTE **When installing, do not hold the rubber rollers of the ROLL ASSY NUDGER and ROLL ASSY FEED.**

2) Install the ROLL ASSY NUDGER to the SHFT NUDGER (PL7.1.17), and secure the ROLL ASSY NUDGER with the hook.

NOTE **Be sure to install the hook of the ROLL ASSY NUDGER into the groove of the SHAFT NUDGER.**

3) Press the 150 FEEDER ASSY (PL5.1.1) down so that it returns to the original position.
4) Install the Paper Cassettes to the Tray 1 and Tray 2.
5) Close the COVER OPEN (PL1.1.2).

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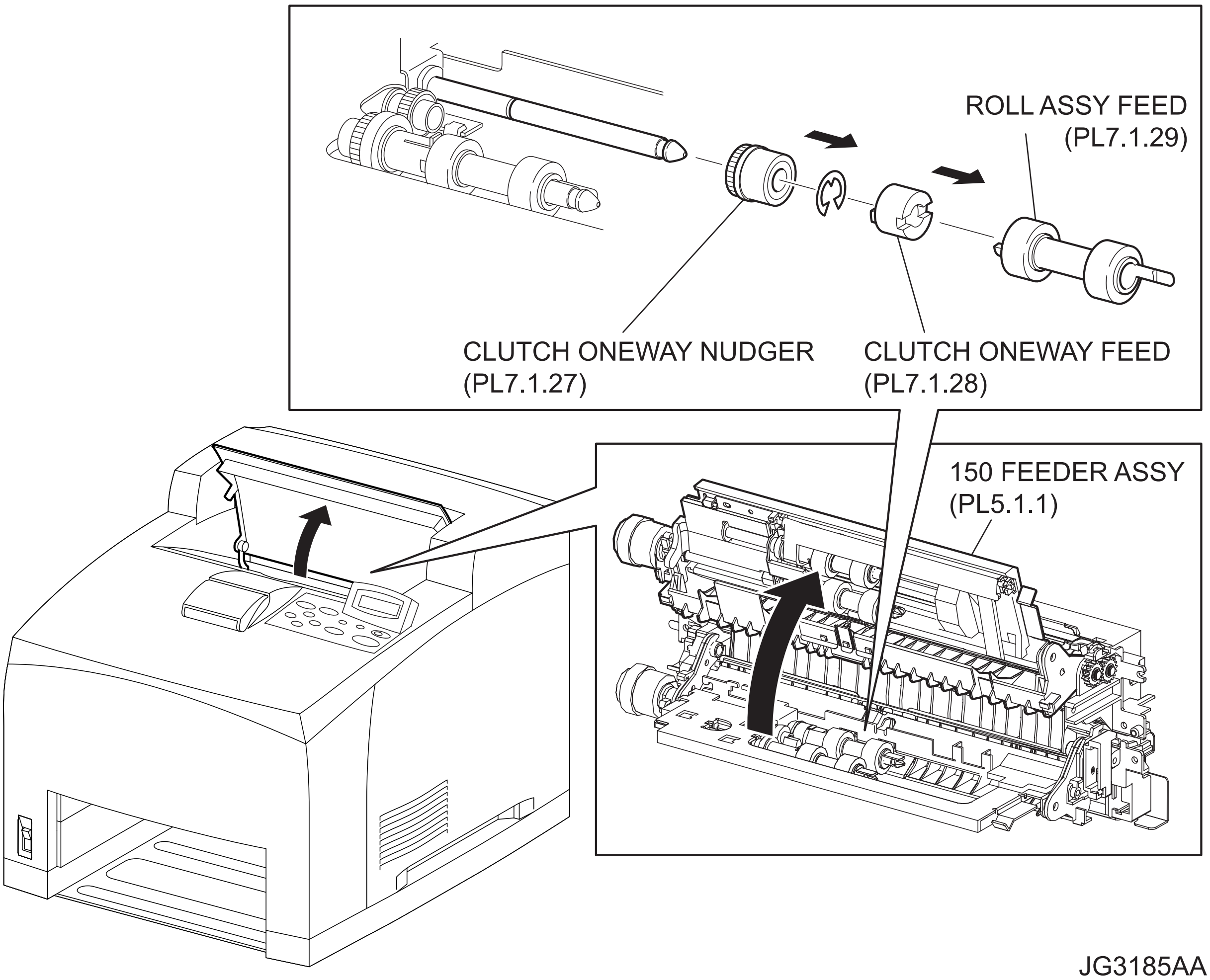
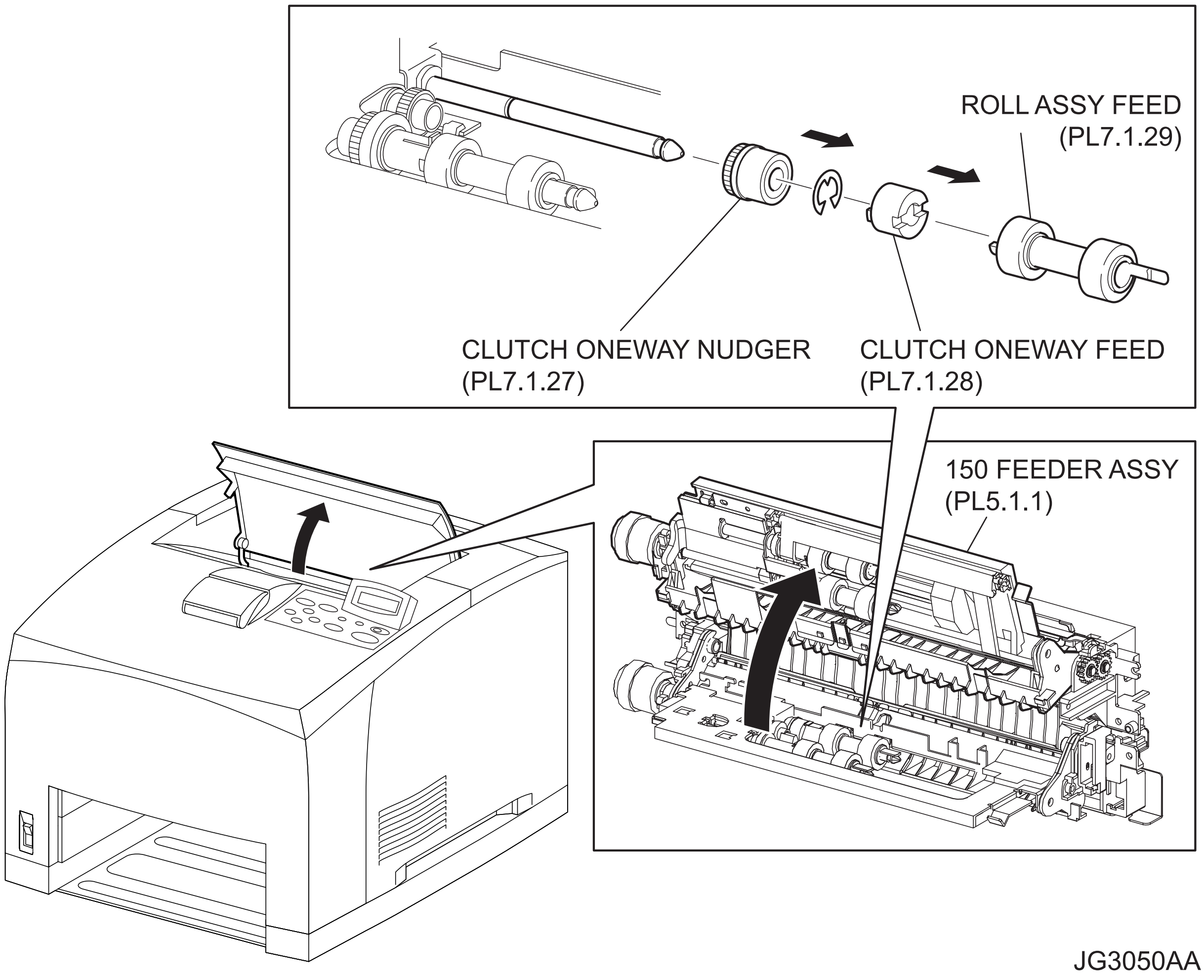
RRP7.3 CLUTCH ONEWAY NUDGER (PL7.1.27)


ROLL ASSY FEED
(PL7.1.29)
CLUTCH ONEWAY NUDGER
(PL7.1.27)
CLUTCH ONEWAY FEED
(PL7.1.28)
150 FEEDER ASSY
(PL5.1.1)

JG3185AA

(34PPM)


ROLL ASSY FEED
(PL7.1.29)
CLUTCH ONEWAY NUDGER
(PL7.1.27)
CLUTCH ONEWAY FEED
(PL7.1.28)
150 FEEDER ASSY
(PL5.1.1)
JG3050AA

(24PPM)

Removal

1) Open the COVER OPEN (PL1.1.2) so that the removing operation can be checked visually.
2) Remove the Paper Cassettes of the Tray 1 and Tray 2.
3) Lift up the 150 FEEDER ASSY (PL5.1.1).

NOTE **Althrough the 150 FEEDER ASSY clicks into midway when lifted up, push it a little bit further.**

4) While holding the 150 FEEDER ASSY, remove the ROLL ASSY FEED (PL7.1.29) b y hand which is inserted through the space left by the Paper Cassettes. (RRP7.2)

NOTE **When removing, do not hold the rubber rollers of the ROLL ASSY FEED.**

5) Pull out the CLUTCH ONEWAY FEED (PL76.1.28) from the SHAFT FEED (PL7.1.26).
6) Remove the E-ring securing the CLUTCH ONEWAY NUDGER to the SHAFT FEED.
7) Pull out the CLUTCH ONEWAY NUDGER from the SHAFT FEED.

Replacement

1) Install the CLUTCH ONEWAY NUDGER to the SHAFT FEED (PL7.1.26), and secure it using the E-ring.
2) Install the CLUTCH ONEWAY FEED (PL7.1.28) to the SHAFT FEED.
3) Install the ROLL ASSY FEED (PL7.1.29) to the SHAFT FEED, and secure it with the hook. (RRP7.2)

NOTE **Be sure to install the hook of the ROLL ASSY FEED into the groove of the SHAFT FEED.**

NOTE **When installing, do not hold the rubber rollers of the ROLL ASSY FEED.**

4) Press the 150 FEEDER ASSY (PL5.1.1) down so that it returns to the original position.
5) Close the COVER OPEN (PL1.1.2).

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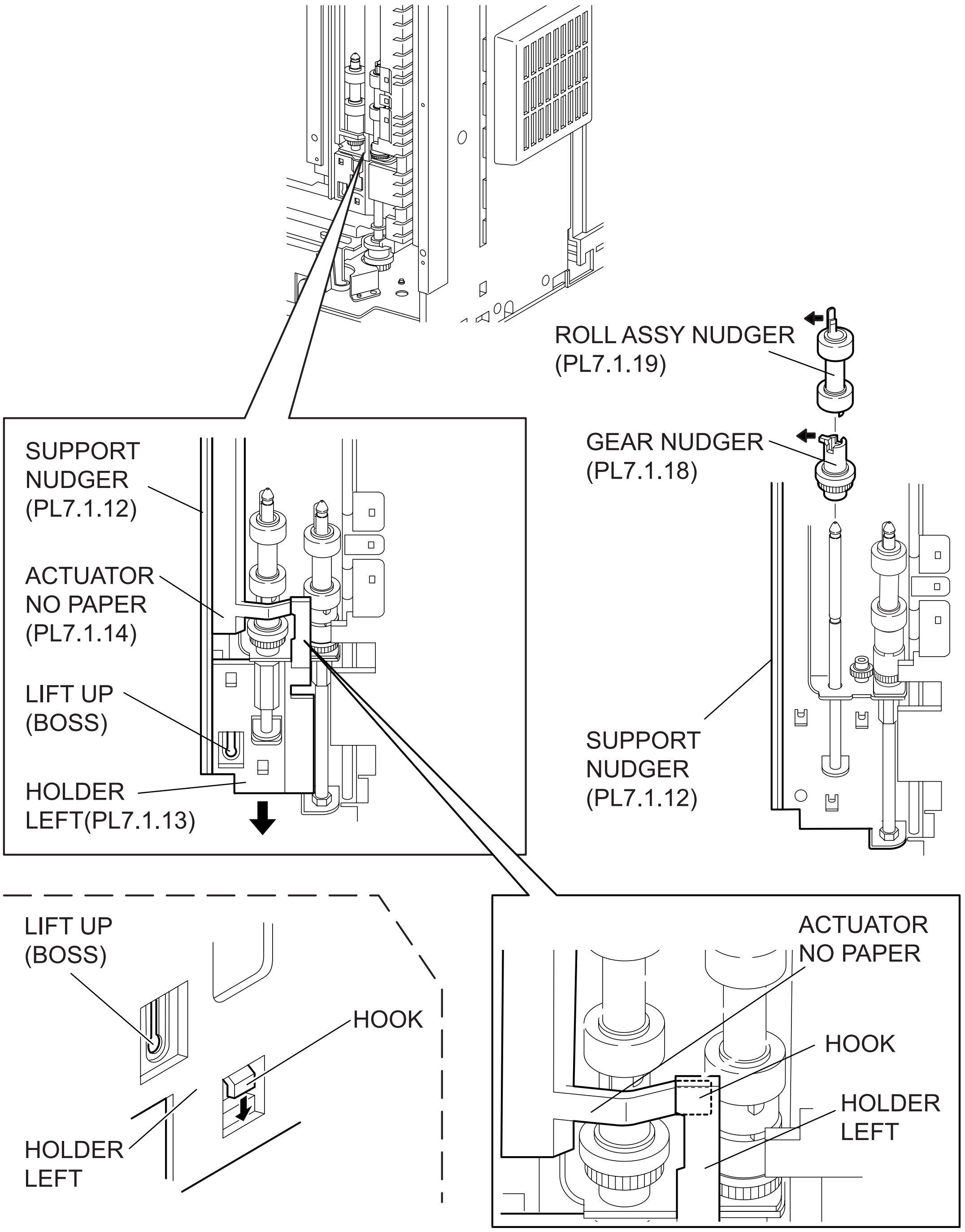
RRP7.4 GEAR NUDGER (PL7.1.18)


ROLL ASSY NUDGER
(PL7.1.19)
GEAR NUDGER
(PL7.1.18)
SUPPORT
NUDGER
(PL7.1.12)
ACTUATOR
NO PAPER
(PL7.1.14)
LIFT UP
(BOSS)
HOLDER
LEFT(PL7.1.13)
SUPPORT
NUDGER
(PL7.1.12)
LIFT UP
(BOSS)
HOOK
HOLDER
LEFT
ACTUATOR
NO PAPER
HOOK
HOLDER
LEFT

JG3051AA

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
2) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
3) Place the printer down on its left side.

NOTE **Be careful not to scratch the cover, and do not given a shock to the printer from a top.**

4) Open the COVER OPEN (PL1.1.2).
5) While lifting up the boss of the HOLDER LEFT (PL7.1.13) at the back of the 550 FEEDER ASSY, shift the HOLDER LEFT in the direction of the arrow to remove 3 hooks.
6) Remove the HOLDER LEFT from the SUPPORT NUDGER (PL7.1.12). At the same time, the ACTUATOR NO PAPER (PL7.1.14) is removed.
7) Release the hook securing the ROLL ASSY NUDGER (PL7.1.19), and pull it out from the SHAFT NUDGER (PL7.1.17).

NOTE **When removing, do not hold the rubber rollers of the ROLL ASSY NUDGER.**

8) Release the hook securing the GEAR NUDGER, and pull it out from the SHAFT NUDGER.

NOTE **When removing, do not hold the rubber rollers of the GEAR NUDGER.**

Replacement

1) Install the GEAR NUDGER to the SHAFT NUDGER (PL7.1.17), and secure it with the hook.

NOTE **When installing, do not hold the rubber rollers of the GEAR NUDGER.**

NOTE **Be sure to install the hook of the GEAR NUDGER into the groove of the SHAFT NUDGER.**

2) Install the ROLL ASSY NUDGER (PL7.1.19) to the SHAFT NUDGER, and secure it with the hook.

NOTE **When installing, do not hold the rubber rollers of the ROLL ASSY NUDGER.**

NOTE **Be sure to install the hook of the ROLL ASSY NUDGER into the groove of the SHAFT NUDGER.**

3) Install the HOLDER LEFT (PL7.1.13) and ACTUATOR NO PAPER (PL7.1.14) to the SUPPORT NUDGER (PL7.1.12).

NOTE **Be sure to install the shafts on both ends of the ACTUATOR NO PAPER into the HOLDER LEFT and SUPPORT NUDGER.**

NOTE **Assemble the hook of the ACTUATOR NO PAPER to the HOLDER LEFT as shown in the figure.**

4) Move the HOLDER LEFT in the opposite direction of the arrow, and secure it to the 550 FEEDER ASSY with the 3 hooks.

NOTE **After installing, move the ACTUATOR NO PAPER with a finger, and make sure that the ACTUATOR NO PAPER operates smoothly.**

5) Return the printer to the normal use state.
6) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
7) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)

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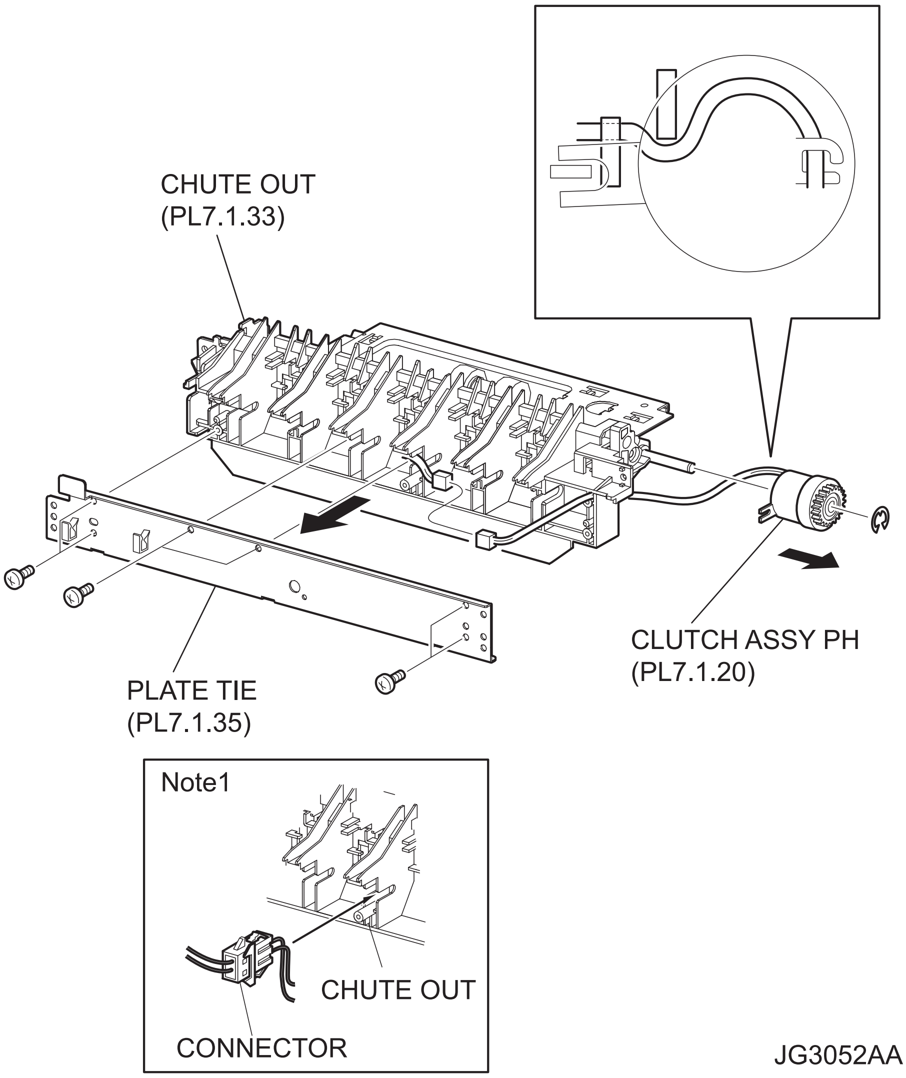
RRP7.5 CLUTCH ASSY PH (PL7.1.20)


CHUTE OUT
(PL7.1.33)
CLUTCH ASSY PH
(PL7.1.20)
PLATE TIE
(PL7.1.35)
Note1
CHUTE OUT
CONNECTOR
JG3052AA

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
2) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
3) Remove the COVER REAR (PL1.1.3). (RRP1.1)
4) Remove the FAN MAIN (PL12.1.10). (RRP12.6)
5) Remove the CHUTE TRANSFER (PL8.1.22) together with the BTR ASSY. (RRP8.11)
6) Remove the 150 FEEDER ASSY (PL5.1.1). (RRP5.1)
7) Remove the 550 FEEDER ASSY (PL7.1.10). (RRP7.1)
8) Remove the 6 screws (gold tapping, 8mm) securing the PLATE TIE (PL7.1.35) to the CHUTE OUT (PL7.1.33), and remove the PLATE TIE from the CHUTE OUT.
9) Disconnect the connector (P/J247) of the CLUTCH ASSY PH from the HARNESS ASSY TRAY 2 (PL7.1.36).
10) Remove the E-ring securing the CLUTCH ASSY PH, and remove the CLUTCH ASSY PH from the SHAFT FEED (PL7.1.26).

Replacement

1) Install the CLUTCH ASSY PH to the SHAFT FEED (PL7.1.26), and secure it using the E-ring.

NOTE **When installing, make sure that the notch of the CLUTCH ASSY PH is combined with the boss of the CHUTE OUT.**

2) Connect the connector (P/J247) of the CLUTCH ASSY PH to the HARNESS ASSY TRAY 2 (PL7.1.36). After connectiong the connector, put the connector into the space between the ribs of the CHUTE OUT.

NOTE **Be careful of the arranging of the harness of the CLUTCH ASSY PH.**

3) Install the PLATE TIE (PL7.1.35) to the CHUTE OUT (PL7.1.33) using the 6 screws (gold tapping, 8mm).
4) Install the 550 FEEDER ASSY (PL7.1.10). (RRP7.1)
5) Install the 150 FEEDER ASSY (PL5.1.1). (RRP5.1)
6) Install the CHUTE TRANSFER (PL8.1.22). (RRP8.11)

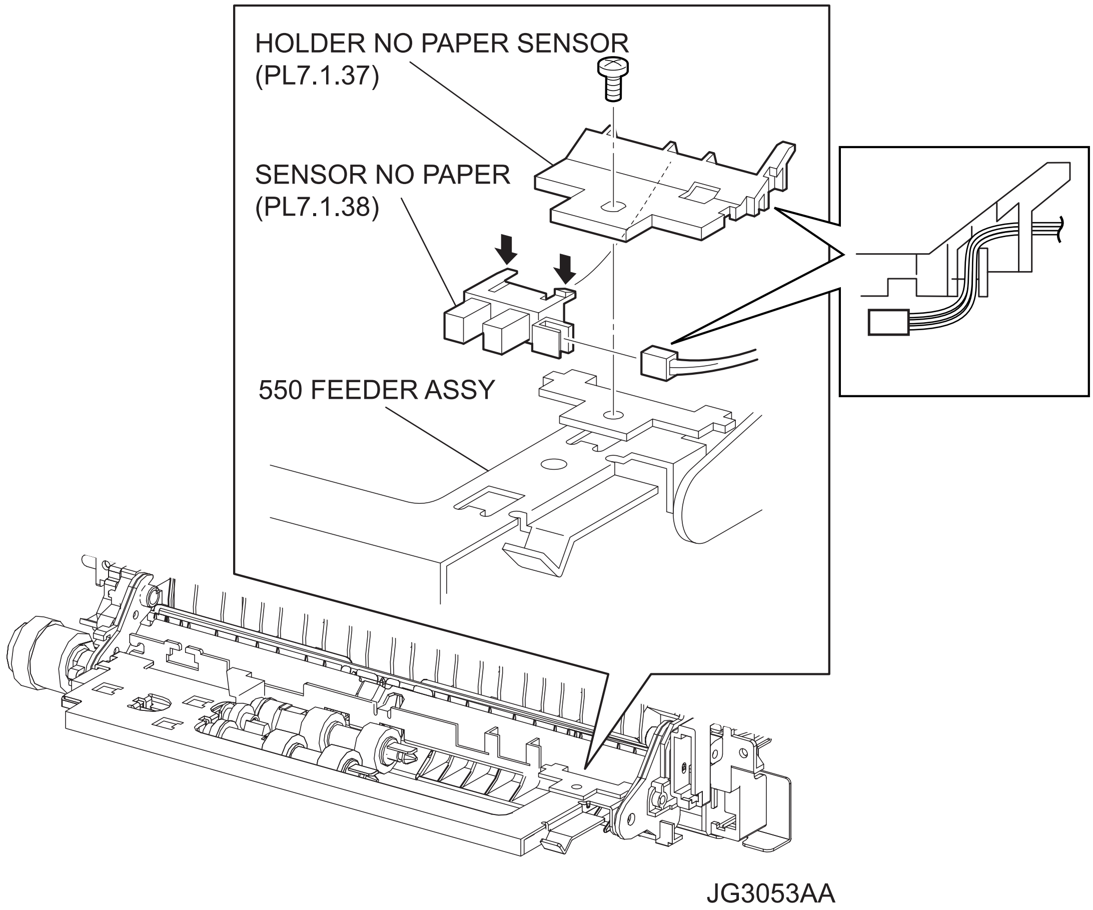
NOTE **Do not tighten the screw to the left side hole of the CHUTE TRANSFER.**

7) Install the FAN MAIN (PL12.1.10). (RRP12.6)
8) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

9) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
10) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)

RRP7.6 SENSOR NO PAPER (PL7.1.38)


HOLDER NO PAPER SENSOR
(PL7.1.37)
SENSOR NO PAPER
(PL7.1.38)
550 FEEDER ASSY
JG3053AA

Removal

1) Remove the COVER REAR 500 /COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
2) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
3) Remove the COVER REAR (PL1.1.3). (RRP1.1)
4) Remove the FAN MAIN (PL12.1.10). (RRP12.6)
5) Remove the CHUTE TRANSFER (PL8.1.22) together with the BTR ASSY. (RRP8.11)
6) Remove the 150 FEEDER ASSY (PL5.1.1). (RRP5.1)
7) Remove the screw (gold, 6mm) securing the HOLDER NO PAPER SENSOR (PL7.1.37).
8) Remove the HOLDER NO PAPER SENSOR from the 550 FEEDER ASSY.
9) Release the hooks securing the SENSOR NO PAPER to the HOLDER NO PAPER SENSOR, and remove the SENSOR NO PAPER.
10) Disconnect the HARNESS ASSY TRAY 2 (PL7.1.36) from the connector (P/J246) of the SENSOR NO PAPER.

Replacement

1) Connect the HARNESS ASSY TRAY 2 (PL7.1.36) to the connector (P/J246) of the SENSOR NO PAPER.
2) Install the SENSOR NO PAPER to the HOLDER NO PAPER SENSOR (PL7.1.37), and secure it using hooks.
3) Put the wires of the HARNESS ASSY TRAY 2 to the notch of the HOLDER NO PAPER SENSOR as shown in the figure.
4) Install the HOLDER NO PAPER SENSOR to the 550 FEEDER ASSY using the screw (gold, 6mm).

NOTE **After tightening the screw, make sure that the wires of the HARNESS ASSY TRAY 2 have not pinched.**

5) Install the 150 FEEDER ASSY (PL5.1.1). (RRP5.1)
6) Install the CHUTE TRANSFER (PL8.1.22). (RRP8.11)

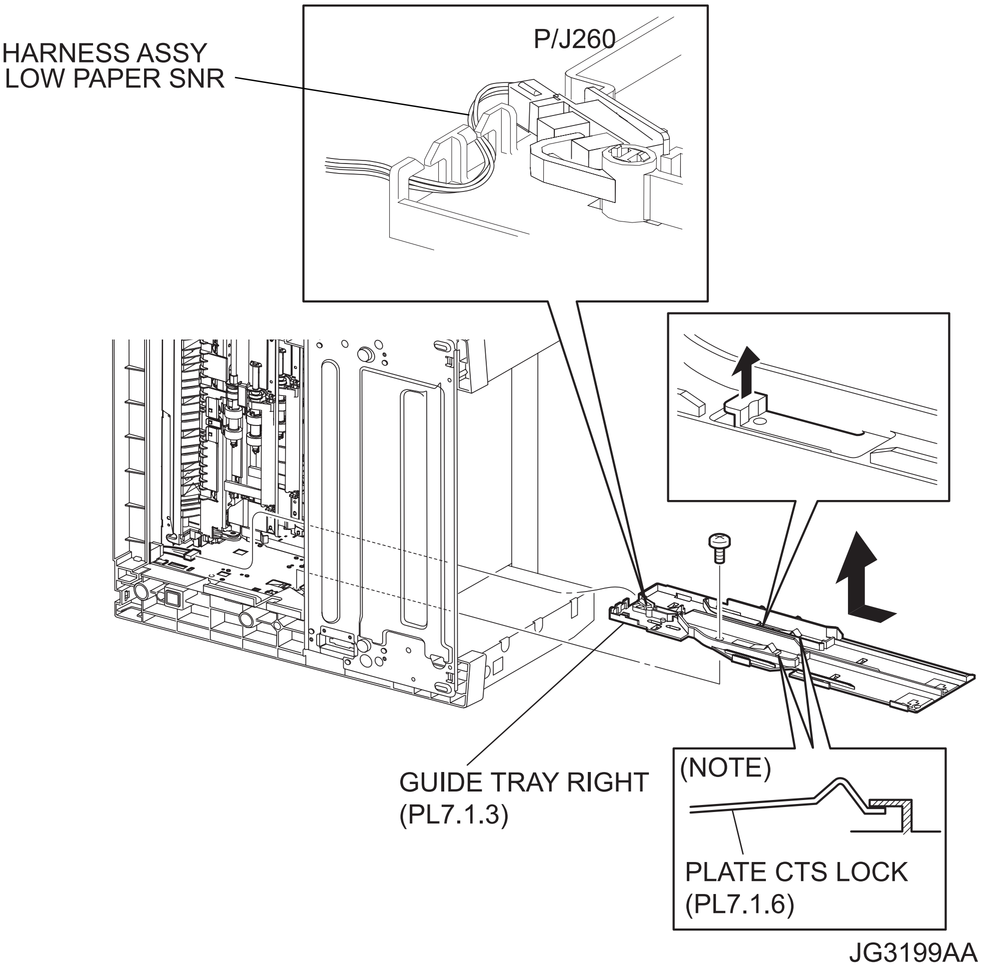
NOTE **Do not tighten the screw to the left side hole of the CHUTE TRANSFER.**

7) Install the FAN MAIN (PL12.1.10). (RRP12.6)
8) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

9) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
10) Install the COVER REAR 500 /COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)

RRP7.7 GUIDE TRAY RIGHT (PL7.1.3)


HARNESS ASSY
LOW PAPER SNR
P/J260
GUIDE TRAY RIGHT
(PL7.1.3)
(NOTE)
PLATE CTS LOCK
(PL7.1.6)
JG3199AA

Removal

1) Rewmove the EP CARTRIDGE and Paper Cassettes.
2) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
3) Remove the COVER REAR (PL1.1.3). (RRP1.1)
4) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
5) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
6) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
7) Remove the COVER EXIT 500/CHUTE ASSY EXIT 250 (Reference Only) (PL10.1.1/9.1.14). (RRP10.1/9.7)
8) Remove the 500 EXIT ASSY/CHUTE LW EXIT EXT2 ASSY (PL10.1.2/9.1.2). (RRP10.2/9.1)
9) Remove the COVER TOP (PL1.1.7). (RRP1.4)
10) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
11) Place the printer down on its right side.
12) Disconnect the connector (P/J260) of the HARNESS ASSY LOW PAPER SNR from the GUIDE TRAY RIGHT.
13) Remove the screw (silver, 6mm) securing the GUIDE TRAY RIGHT to the frame.
14) Lift up the hook of the GUIDE TRAY RIGHT, and shift it in the direction of the arrow. Then, remove the GUIDE TRAY RIGHT from the frame.

Replacement

1) Shift the GUIDE TRAY RIGHT in the opposite direction of the arrow to install it to the frame, and secure it using the screw (silver, 6mm).

NOTE

When installing the GUIDE TRAY RIGHT, make sure the installing position of the PLATE CST LOCK (PL7.1.6) is in the position shown in the figure, NOTE.

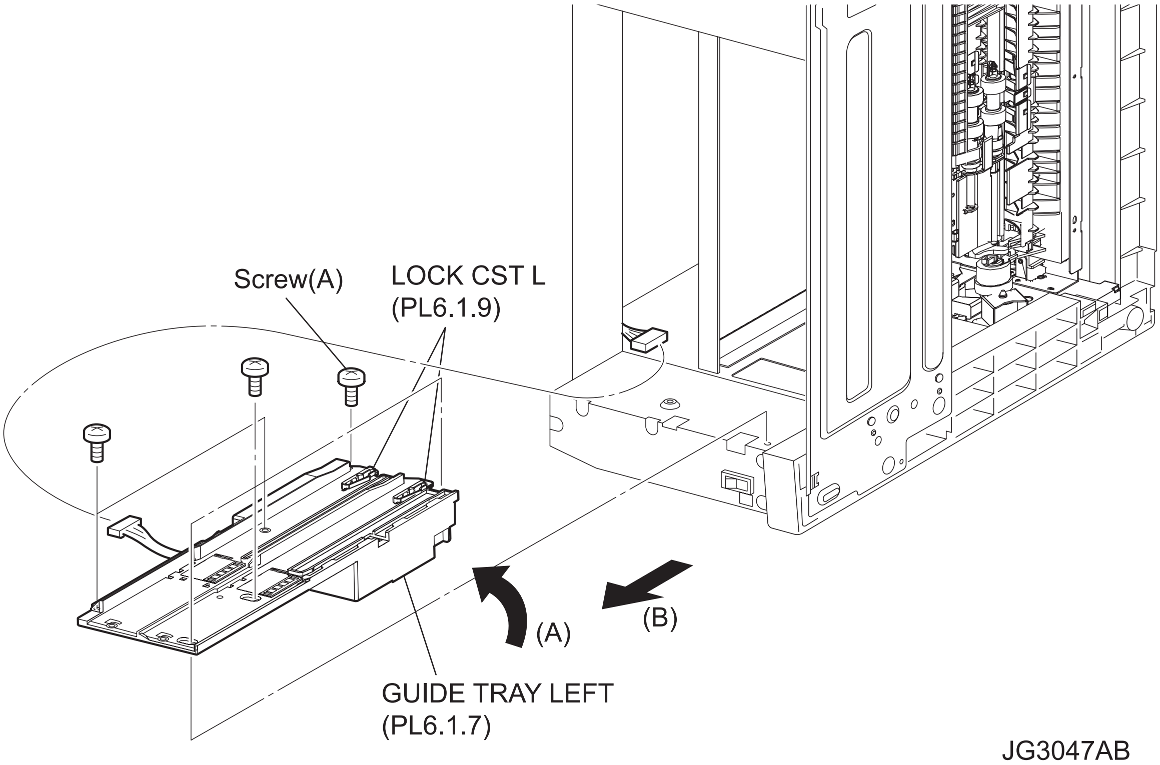
2) Connect the connector (P/J260) of the HARNESS ASSY LOW PAPER SNR to the GUIDE TRAY RIGHT.
3) Return the printer to the normal use state.
4) Install the COVER FRONT (PL1.1.5). (RRP1.5)
5) Install the COVER TOP (PL1.1.7). (RRP1.4)
6) Install the 500 EXIT ASSY/CHUTE LW EXIT EXT2 ASSY (PL10.1.2/9.1.2). (RRP10.2/9.1)
7) Install the COVER EXIT 500/CHUTE ASSY EXIT 250 (Reference Only) (PL10.1.1/9.1.14). (RRP10.1/9.7)
8) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
9) Install the COVER LEFT (PL1.1.6). (RRP1.3)
10) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
11) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

There are 2 kinds of screws, make sure they are put in the right place.

12) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
13) Install the EP CARTRIDGE and Paper Cassettes.

RRP7.8 GUIDE TRAY LEFT (PL7.1.7)


Screw(A)
LOCK CST L
(PL6.1.9)
(A)
(B)
GUIDE TRAY LEFT
(PL6.1.7)
JG3047AB

Removal

1) Remove the EP CARTRIDGE and Paper Cassettes.
2) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
3) Remove the COVER REAR (PL1.1.3). (RRP1.1)
4) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
5) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
6) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
7) Remove the COVER EXIT 500/CHUTE ASSY EXIT 250 (Reference Only) (PL10.1.1/9.1.14). (RRP10.1/9.7)
8) Remove the 500 EXIT ASSY/CHUTE LW EXIT EXT2 ASSY (PL10.1.2/9.1.2). (RRP10.2/9.1)
9) Remove the COVER TOP (PL1.1.7). (RRP1.4)
10) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
11) Place the printer down on its left side.
12) Disconnect the HARNESS ASSY LVPS (PL12.1.1) from the connector (P/J1821) of the GUIDE TRAY LEFT .
13) Remove the 6 screws (gold tapping, 8mm x 1, gold, 6mm x 5) securing the GUIDE TRAY LEFT to the frame.
14) Shift the GUIDE TRAY LEFT in the direction of the arrows (A) and (B), and remove it from the frame.

Replacement

1) Shift the GUIDE TRAY LEFT in the opposite direction of the arrows (A) and (B), and install it to the frame.
2) Install the GUIDE TRAY LEFT using the 6 screws (gold tapping, 8mm x 1, gold, 6mm x 5).

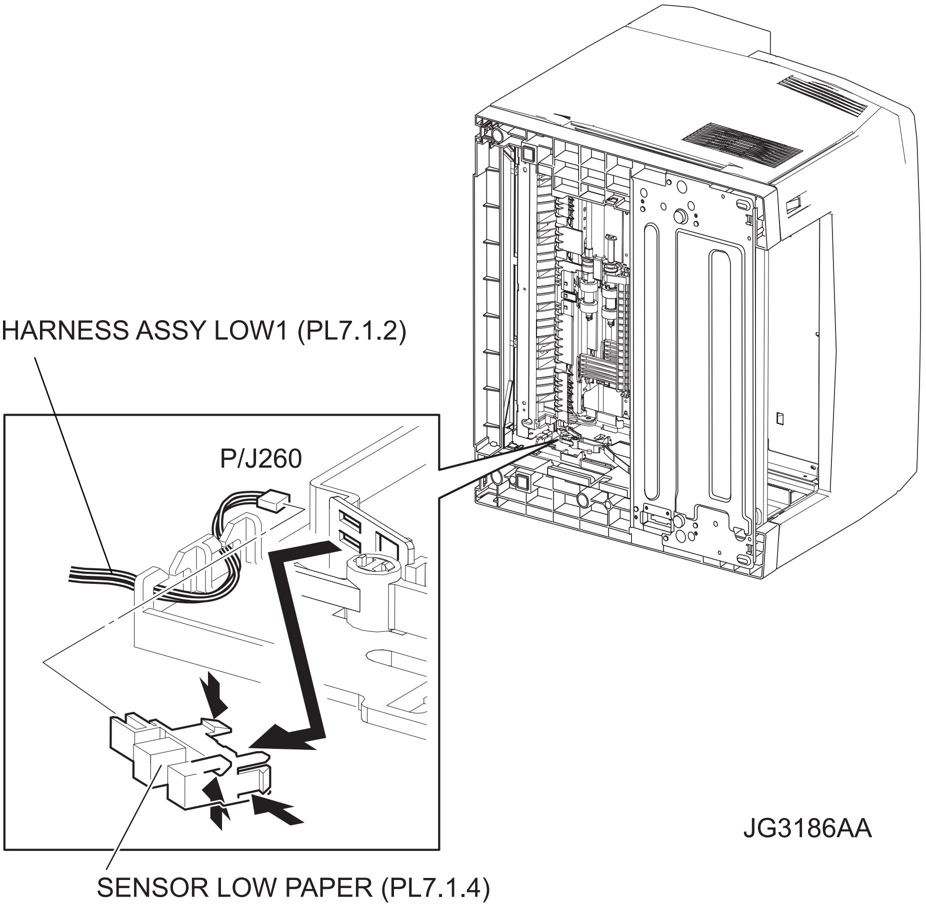
NOTE **Be sure to tighten the screw (gold tapping, 8mm) shown as “Screw (A)” in the figure.**

3) Connect the connector (P/J1821) of the GUIDE TRAY LEFT to the HARNESS ASSY LVPS (PL12.1.1).
4) Return the printer to the normal use state.
5) Install the COVER FRONT (PL1.1.5). (RRP1.5)
6) Install the COVER TOP (PL1.1.7). (RRP1.4)
7) Install the 500 EXIT ASSY/CHUTE LW EXIT EXT2 ASSY (PL10.1.2/9.1.2). (RRP10.2/9.1)
8) Install the COVER EXIT 500/CHUTE ASSY EXIT 250 (Reference Only) (PL10.1.1/9.1.14). (RRP10.1/9.7)
9) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
10) Install the COVER LEFT (PL1.1.6). (RRP1.3)
11) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
12) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

13) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
14) Install the EP CARTRIDGE and Paper Cassettes.

RRP7.9 SENSOR LOW PAPER (PL7.1.4)


HARNESS ASSY LOW1 (PL7.1.2)
P/J260
JG3186AA
SENSOR LOW PAPER (PL7.1.4)

Removal

1) Remove the EP CARTRIDGE and Paper Cassettes.
2) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Place the printer down on its right side.

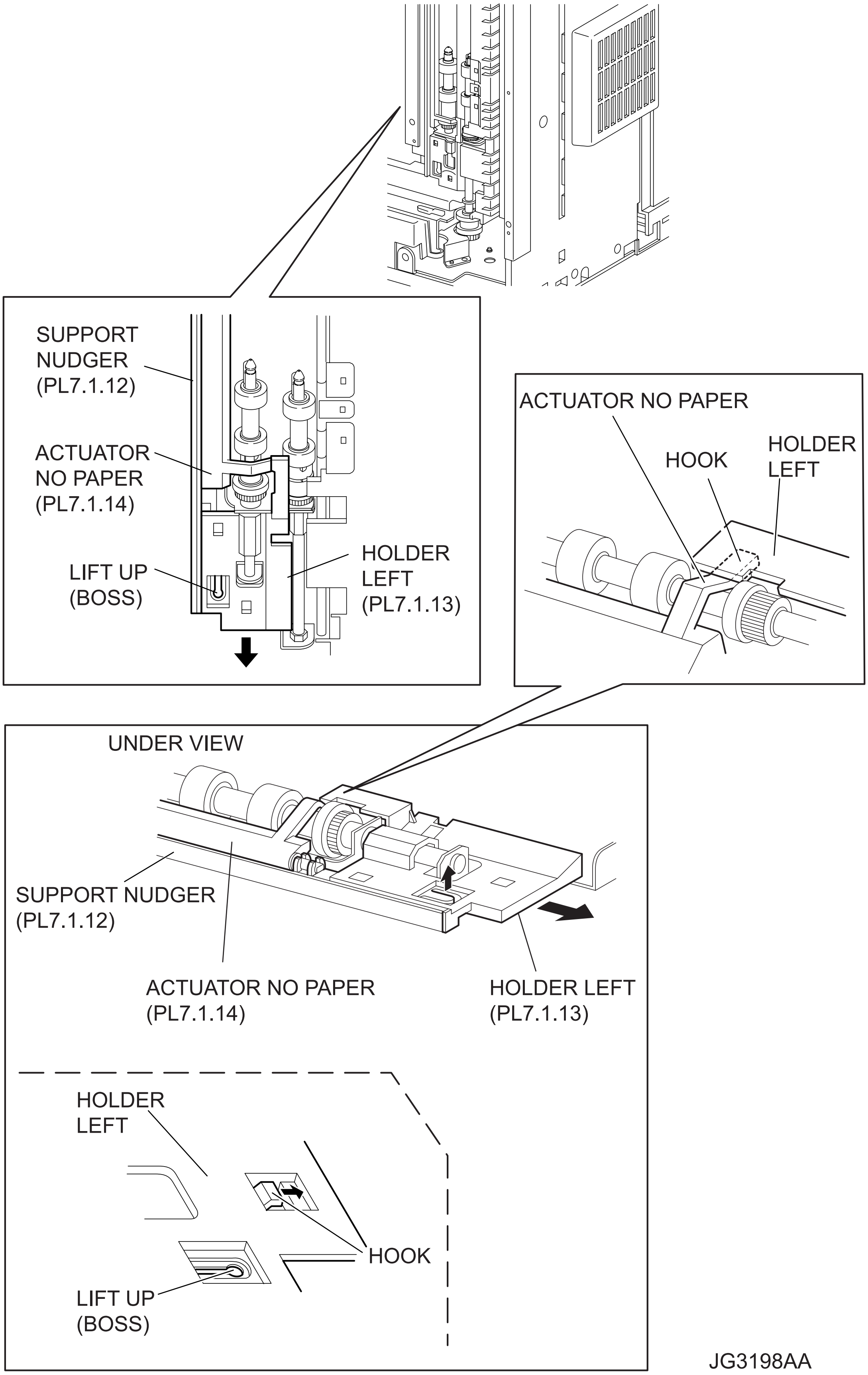
NOTE **Be careful not to scratch the cover, and do not given a shock to the printer from a top.**

5) Disconnect the connector (P/J260) of the HARNESS ASSY LOW 1 (PL7.1.2) from the SENSOR.
6) Release the hooks of the SENSOR, and remove it from the GUIDE TRAY RIGHT (PL7.1.3).

Replacement

1) Install the SENSOR LOE PAPER to the GUIDE TRAY RIGHT (PL7.1.3), and secure it with hooks.
2) Connect the connector (P/J260) of the HARNESS ASSY LOW 1 (PL7.1.2) to the SENSOR.
3) Return the printer to the normal use state.
4) Install the FUSER ASSSY (PL8.1.20). (RRP8.8)
5) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
6) Install the EP CARTRIDGE and Paper Cassettes.

RRP7.10 ACTUATOR NO PAPER (PL7.1.14)


SUPPORT NUDGER (PL7.1.12)
ACTUATOR NO PAPER (PL7.1.14)
LIFT UP (BOSS)
HOLDER LEFT (PL7.1.13)
ACTUATOR NO PAPER
HOOK
HOLDER LEFT
UNDER VIEW
SUPPORT NUDGER (PL7.1.12)
ACTUATOR NO PAPER (PL7.1.14)
HOLDER LEFT (PL7.1.13)
HOLDER LEFT
HOOK
LIFT UP (BOSS)

JG3198AA

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
2) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
3) Place the printer down on its left side.

NOTE **Be careful not to scratch the cover, and do not given a shock to the printer from a top.**

4) Open the COVER OPEN (PL1.1.2).
5) While lifting up the boss of the HOLDER LEFT (PL7.1.13) at the back of the 550 FEEDER ASSY, shift the HOLDER LEFT in the direction of the arrow to remove 3 hooks.
6) Remove the HOLDER LEFT from the SUPPORT NUDGER (PL7.1.12). At the same time, the ACTUATOR NO PAPER is removed.

Replacement

1) Install the HOLDER LEFT (PL7.1.13) and ACTUATOR NO PAPER to the SUPPORT NUDGER (PL7.1.12).

NOTE **Be sure to install the shafts on both ends of the ACTUATOR NO PAPER into the HOLDER LEFT and SUPPORT NUDGER.**

NOTE **Assemble the hook of the ACTUATOR NO PAPER to the HOLDER LEFT as shown in the figure.**

2) Move the HOLDER LEFT in the opposite direction of the arrow, and secure it to the 550 FEEDER ASSY with the 3 hooks.

NOTE **After installing, move the ACTUATOR NO PAPER with a finger, and make sure that the ACTUATOR NO PAPER operates smoothly.**

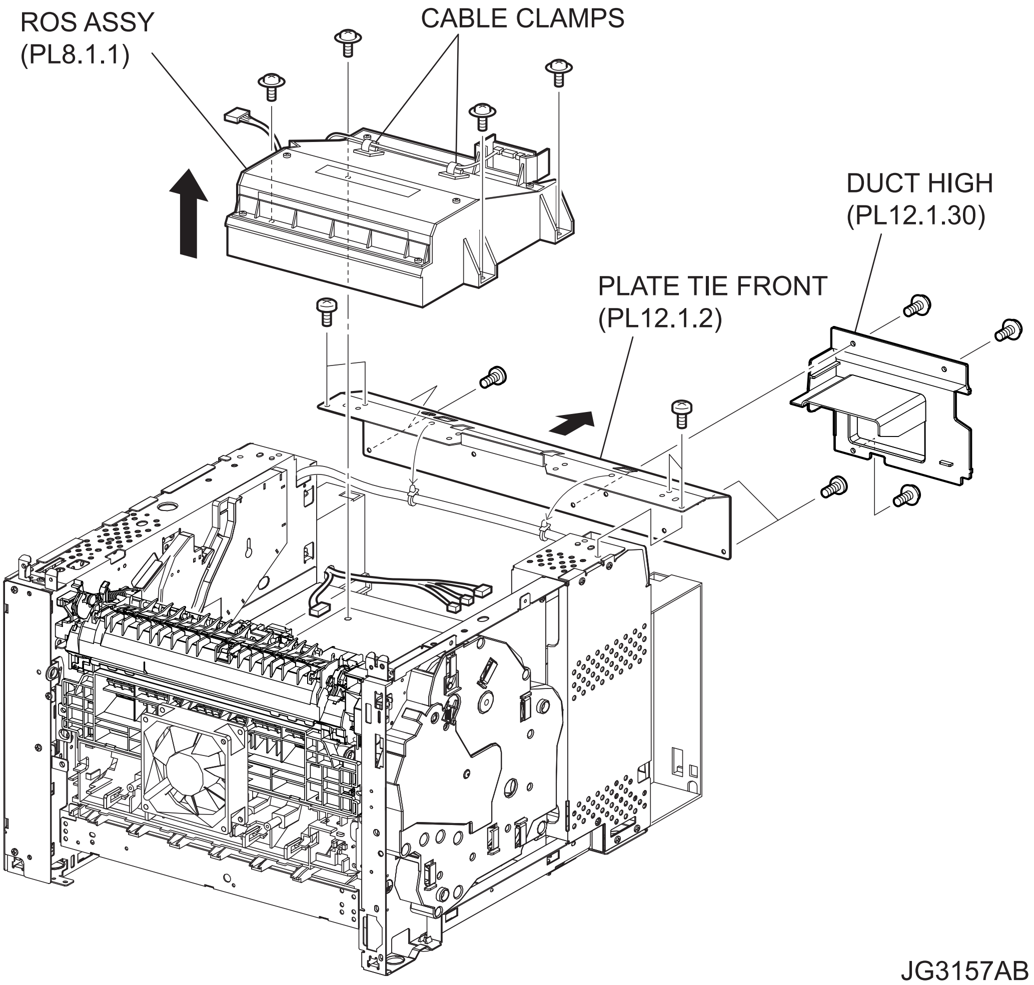
3) Return the printer to the normal use state.
4) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
5) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)

RRP8. Xero

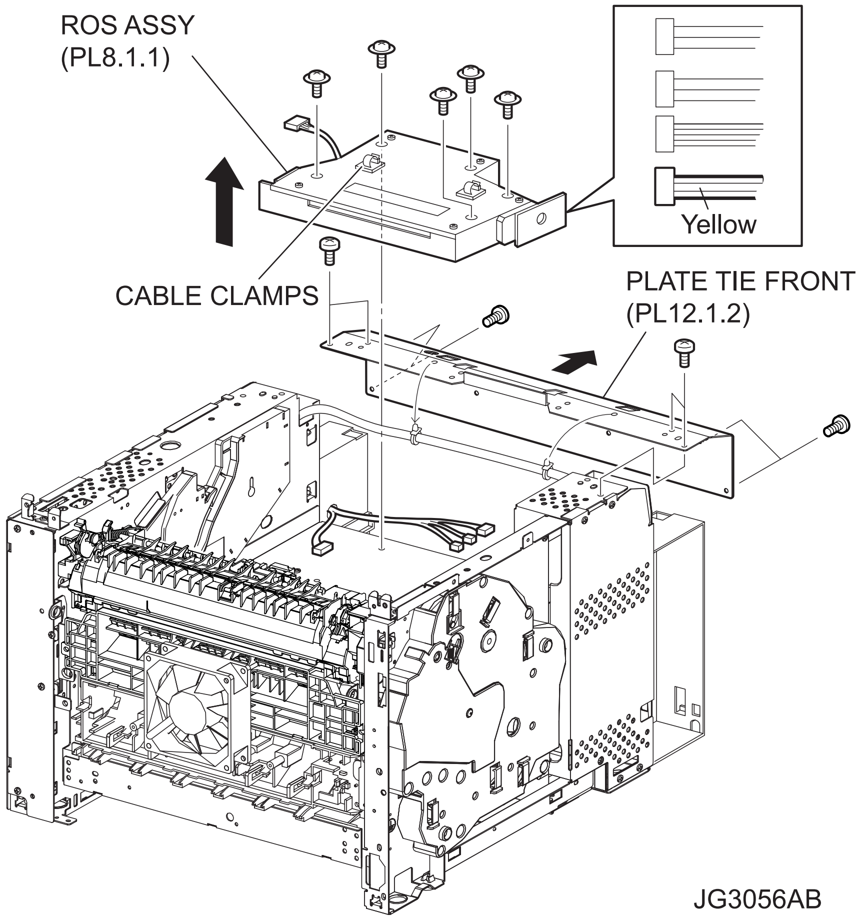
RRP8.1 ROS ASSY (PL8.1.1)

NOTE

When performing the ROS ASSY removal and/or installation, be sure to perform the operation on a level and smooth work surface desk or the like. If the operation is performed on a rough and/or inclined worktop, the ROS ASSY will be out of alignment.


ROS ASSY
(PL8.1.1)
CABLE CLAMPS
DUCT HIGH
(PL12.1.30)
PLATE TIE FRONT
(PL12.1.2)
JG3157AB

(34PPM)


ROS ASSY
(PL8.1.1)
Yellow
CABLE CLAMPS
PLATE TIE FRONT
(PL12.1.2)
JG3056AB

(24PPM)

34PPM

Removal

1) Remove the COVER REAR 500 (PL10.23.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
6) Remove the 500 EXIT ASSY (PL10.1.2). (RRP10.2)
7) Remove the COVER TOP (PL1.1.7). (RRP1.4)
8) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
9) Remove the DUCT FRONT (PL8.1.4). (RRP8.2)
10) Remove the 3 screws (silver with flange, 8mm) securing the DUCT HIGH (PL12.1.30), and remove the DUCT HIGH.
11) Release the 2 clampers holding the harnesses, from the PLATE TIE FRONT (PL12.1.2).
12) Remove the 8 screws (silver, 6mm) securing the PLATE TIE FRONT to the frame, and remove the PLATE TIE FRONT.
13) Release the 2 clampersholding the harnesses, from the ROS ASSY.
14) Disconnect 4 connectors of the HARNESS ASSY ROS (PL8.1.2).

NOTE **The printed circuit board on the ROS ASSY is fragile, therefore, be sure to hold it with hand when disconnecting the connectors.**

15) Remove the 4 screws (black with flange, 8mm) securing the ROS ASSY to the frame.

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

16) Remove the ROS ASSY.

Replacement

1) Install the ROS ASSY to the frame using the 4 screws (black with flange, 8mm).

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

2) Connect the connectors of the HARNESS ASSY ROS to the printed circuit board on the ROS ASSY.

NOTE **The printed circuit board on the ROS ASSY is fragile, then, be sure to hold it with hand when connecting the connectors.**

3) Secure the harness with the 2 cable clampers on the ROS ASSY.
4) Install the PLATE TIE FRONT (PL12.1.2) to the frame using the 8 screws (silver, 6mm) and tighten firmly.

NOTE **Be sure to perform this operation on a level and smooth worktop.**

5) Secure the harness to the PLATE TIE FRONT using the 2 clampers.
6) Secure the DUCT HIGH (PL12.1.30) using the 3 screws (silver with flange, 8mm).
7) Install the DUCT FRONT (PL8.1.4). (RRP8.2)
8) Install the COVER FRONT (PL1.1.5). (RRP1.5)
9) Install the COVER TOP (PL1.1.7). (RRP1.4)

10) Install the 500 EXIT ASSY (PL10.1.2). (RRP10.2)
11) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
12) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
13) Install the COVER LEFT (PL1.1.6). (RRP1.3)
14) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

There are 2 kinds of screws, make sure they are put in the right place.

15) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

24PPM

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
6) Remove the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
7) Remove the COVER TOP (PL1.1.7). (RRP1.4)
8) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
9) Remove the DUCT FRONT (PL8.1.4). (RRP8.2)
10) Release the 2 clampers holding the harnesses, from the PLATE TIE FRONT (PL12.1.2).
11) Remove the 8 screws (silver, 6mm) securing the PLATE TIE FRONT to the frame, and remove the PLATE TIE FRONT.
12) Release the 2 clampers holding the harnesses, from the ROS ASSY.
13) Disconnect 3 connectors of the HARNESS ROS ASSY with gray-colored wire from the printed circuit board on the ROS ASSY. The connector with yellow-colored wire remains connected.

NOTE **The printed circuit board on the ROS ASSY is fragile, therefore, be sure to hold it with hand when disconnecting the connectors.**

14) Remove the 5 screws (black with flange, 8mm) securing the ROS ASSY to the frame.

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

15) Remove the ROS ASSY.

Replacement

1) Install the ROS ASSY to the frame using the 5 screws (black with flange, 8mm).

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

2) Connect 3 connectors of the HARNESS ASSY ROS to the printed circuit board on the ROS ASSY.

NOTE **The printed circuit board on the ROS ASSY is fragile, therefore, be sure to hold it with hand when connecting the connectors.**

3) Secure the harness with the 2 cable clampers on the ROS ASSY.
4) Install the PLATE TIE FRONT (PL12.1.2) to the frame using the 8 screws (silver, 6mm) and tighten firmly.

NOTE **Be sure to perform this operation on a level and smooth worktop.**

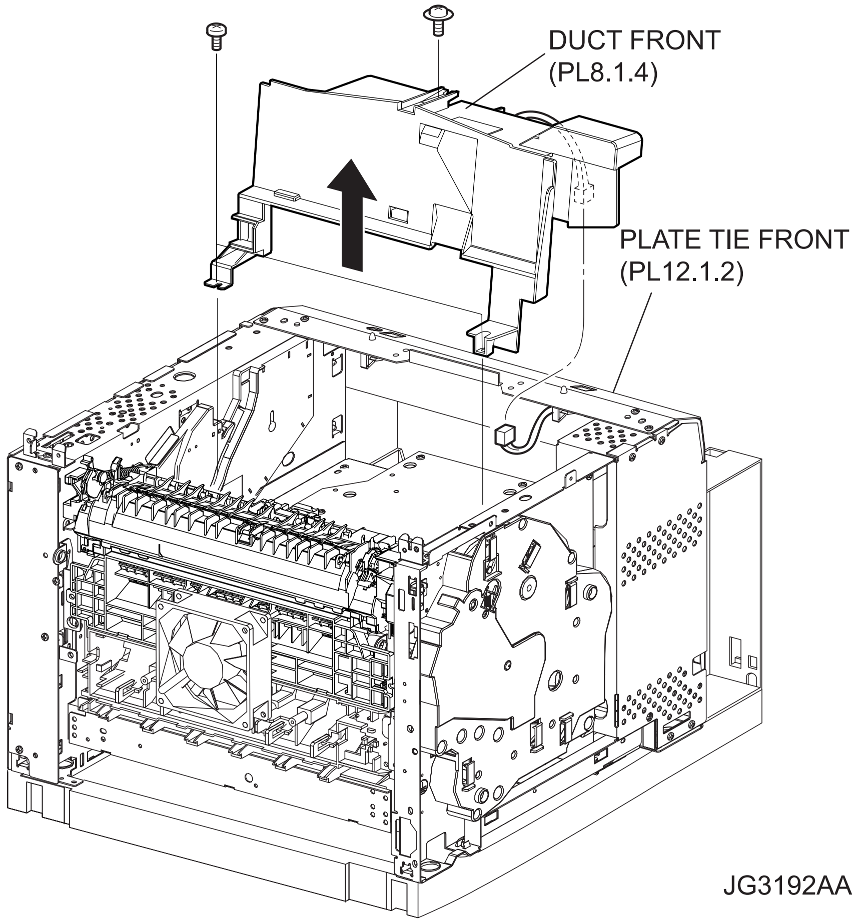
5) Secure the harness to the PLATE TIE FRONT using the 2 clampers.
6) Install the DUCT FRONT (PL8.1.4). (RRP8.2)
7) Install the COVER FRONT (PL1.1.5). (RRP1.5)
8) Install the COVER TOP (PL1.1.7). (RRP1.4)
9) Install the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
10) Install the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
11) Install the COVER RIGHT (PL1.1.4). (RRP1.2)

12) Install the COVER LEFT (PL1.1.6). (RRP1.3)
13) Install the COVER REAR (PL1.1.3). (RRP1.1)

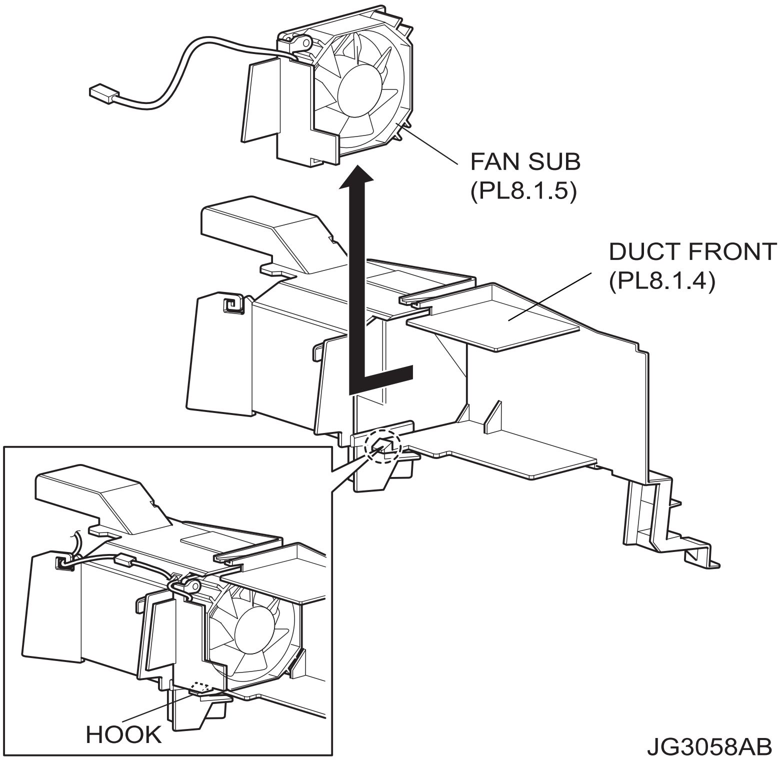
NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

14) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)

RRP8.2 DUCT FRONT (PL8.1.4), FAN SUB (PL8.1.5)

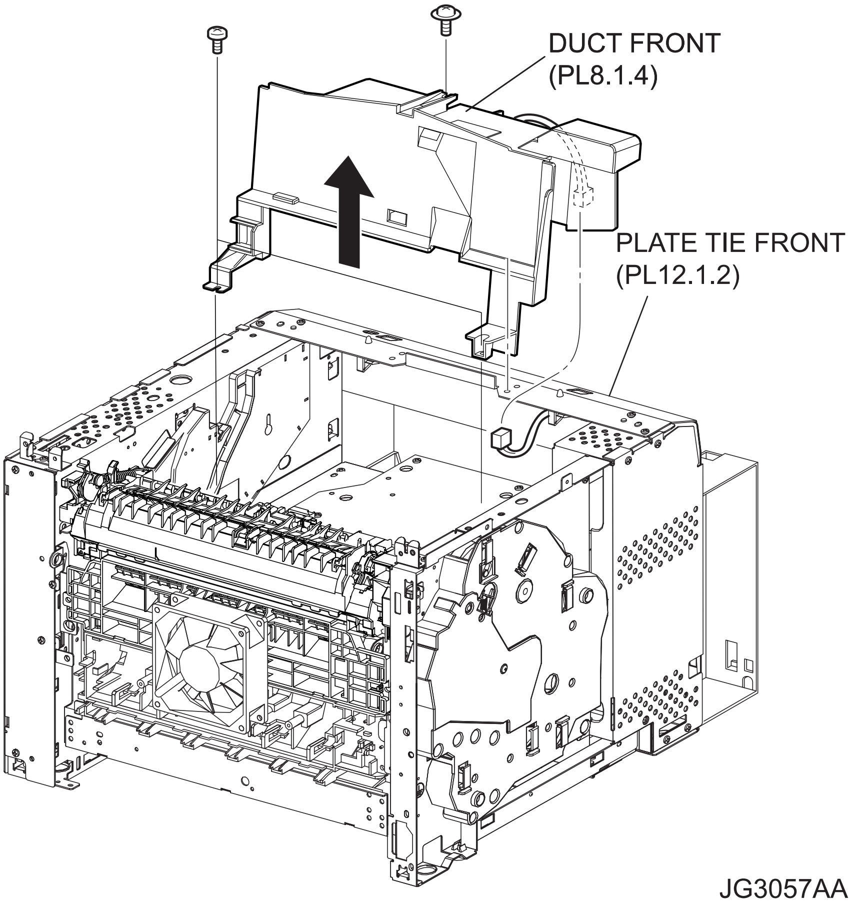

DUCT FRONT
(PL8.1.4)
PLATE TIE FRONT
(PL12.1.2)

JG3192AA

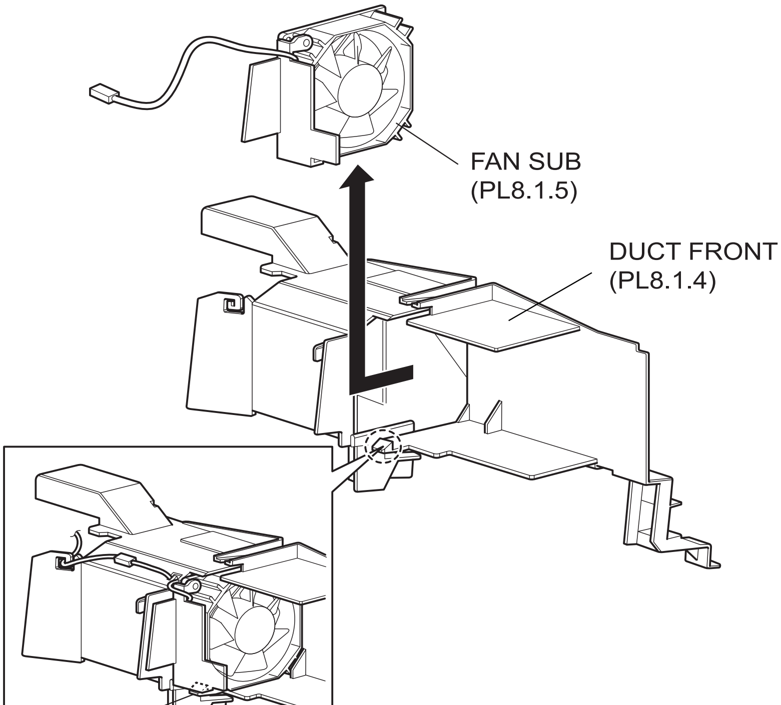

FAN SUB
(PL8.1.5)
DUCT FRONT
(PL8.1.4)
HOOK

JG3058AB

(34PPM)


DUCT FRONT
(PL8.1.4)
PLATE TIE FRONT
(PL12.1.2)

JG3057AA


FAN SUB
(PL8.1.5)
DUCT FRONT
(PL8.1.4)
HOOK

JG3058AB

(24PPM)

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.5)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the COVER EXIT 500 (PL10.1.1)/CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP10.1/9.7)
6) Remove the 500 EXIT ASSY (PL10.1.2)/CHUTE LW EXT2 ASSY (PL9.1.2). (RRP10.2/9.1)
7) Remove the COVER TOP (PL1.1.7). (RRP1.4)
8) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
9) Disconnect the connector (P/J270) of the FAN SUB from the HARNESS ASSY LVPS (PL12.1.1).
10) Remove the 3 screws (silver tapping with flange, 8mm x1, gold tapping, 8mm x 2) securing the DUCT FRONT.
11) Remove the DUCT FRONT attached with the FAN SUB from the frame by moving it in the direction of the arrow.
12) Release the hook securing the FAN SUB to the DUCT FRONT, and remove the FAN SUB.

Replacement

1) Install the FAN SUB to the DUCT FRONT, and secure it with the hook.

NOTE **When installing the FAN SUB to the DUCT FRONT, be sure to install the FAN SUB so that the label is facing inside and the harness is in the place shown in the figure.**

2) Install the DUCT FRONT attached with the FAN SUB to the frame by moving the opposite direction of the arrow shown in the figure.
3) Install the DUCT FRONT to the frame using the 3 screws (silver tapping with flange, 8mm x1, gold tapping, 8mm x 2).
4) Connect the connector (P/J270) of the FAN SUB to the HARNESS ASSY LVPS (PL12.1.1).
5) Install the COVER FRONT (PL1.1.5). (RRP1.5)
6) Install the COVER TOP (PL1.1.7). (RRP1.4)
7) Install the 500 EXIT ASSY (PL10.1.2)/CHUTE LW EXT2 ASSY (PL9.1.2). (RRP10.2/9.1)
8) Install the COVER EXIT 500 (PL10.1.1)/CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP10.1/9.7)
9) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
10) Install the COVER LEFT (PL1.1.6). (RRP1.3)
11) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

12) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.5)

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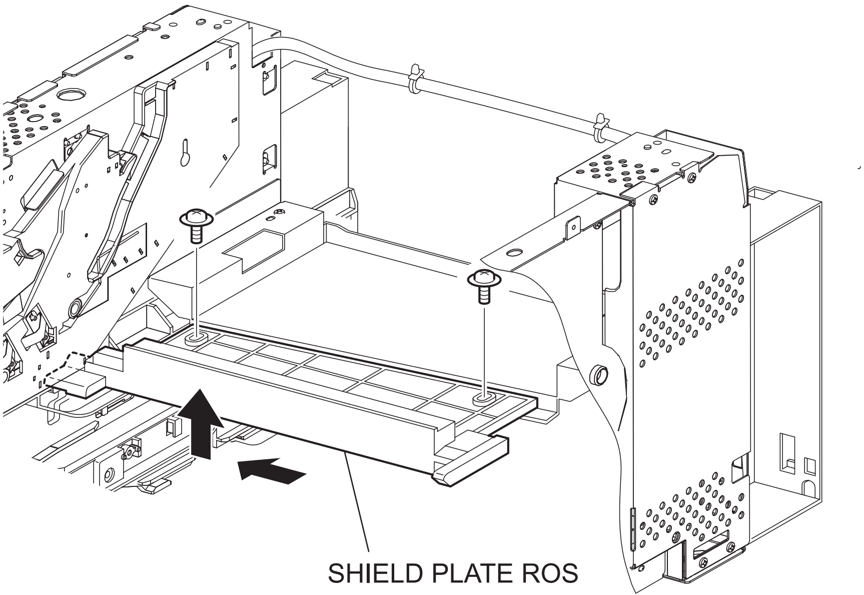
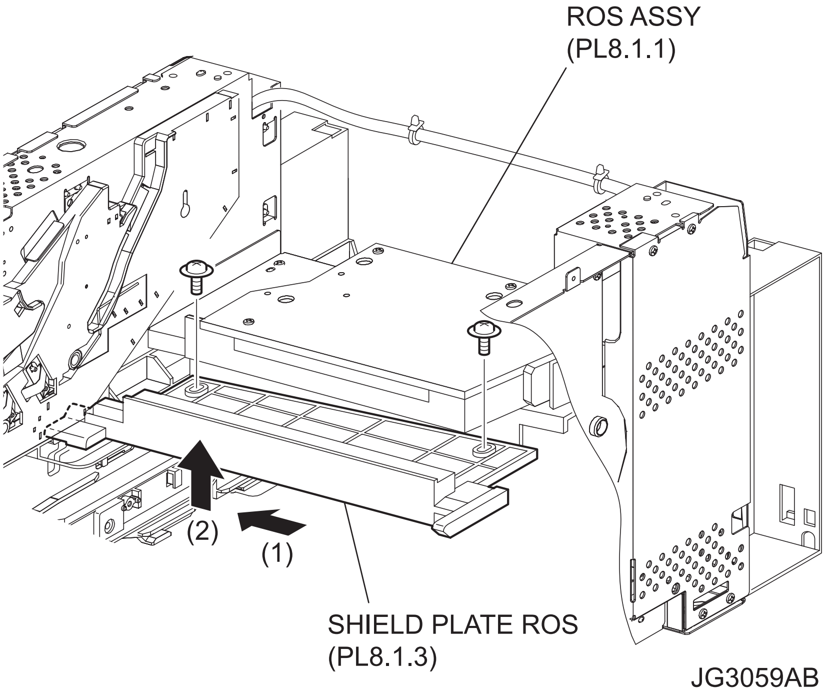
RRP8.3   SHIELD PLATE ROS (PL8.1.3)


SHIELD PLATE ROS
(PL8.1.3)
JG3158AB

(34PPM)


ROS ASSY
(PL8.1.1)
(2)
(1)
SHIELD PLATE ROS
(PL8.1.3)
JG3059AB

(24PPM)

34PPM

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
6) Remove the 500 EXIT ASSY (PL10.1.2) (RRP10.2)
7) Remove the COVER TOP (PL1.1.7). (RRP1.4)
8) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
9) Remove the DUCT FRONT (PL8.1.4). (RRP8.2)
10) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
11) Remove the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

12) Remove the 2 screws (black with flange, 8mm) securing the SHIELD PLATE ROS to the frame.
13) Move the SHIELD PLATE ROS in the direction of the arrows to remove.

Replacement

1) Install the SHIELD PLATE ROS by moving it in the opposite direction of the arrows.
2) Secure the SHIELD PLATE ROS using the 2 screws (black with flange, 8mm) to the flame.

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

3) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Install the DUCT FRONT (PL8.1.4). (RRP8.2)
5) Install the COVER FRONT (PL1.1.5). (RRP1.5)
6) Install the COVER TOP (PL1.1.7). (RRP1.4)
7) Install the 500 EXIT ASSY (PL10.1.2). (RRP10.2)
8) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
9) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
10) Install the COVER LEFT (PL1.1.6). (RRP1.3)
11) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

12) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

24PPM

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
6) Remove the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
7) Remove the COVER TOP (PL1.1.7). (RRP1.4)
8) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
9) Remove the DUCT FRONT (PL8.1.4). (RRP8.2)
10) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
11) Remove the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

12) Remove the 2 screws (black with flange, 8mm) securing the SHIELD PLATE ROS to the frame.
13) Move the SHIELD PLATE ROS in the direction of the arrows to remove.

Replacement

1) Install the SHIELD PLATE ROS by moving it in the opposite direction of the arrows.
2) Secure the SHIELD PLATE ROS using the 2 screws (black with flange, 8mm) to the flame.
3) Install the ROS ASSY (PL8.1.1). (RRP8.1)

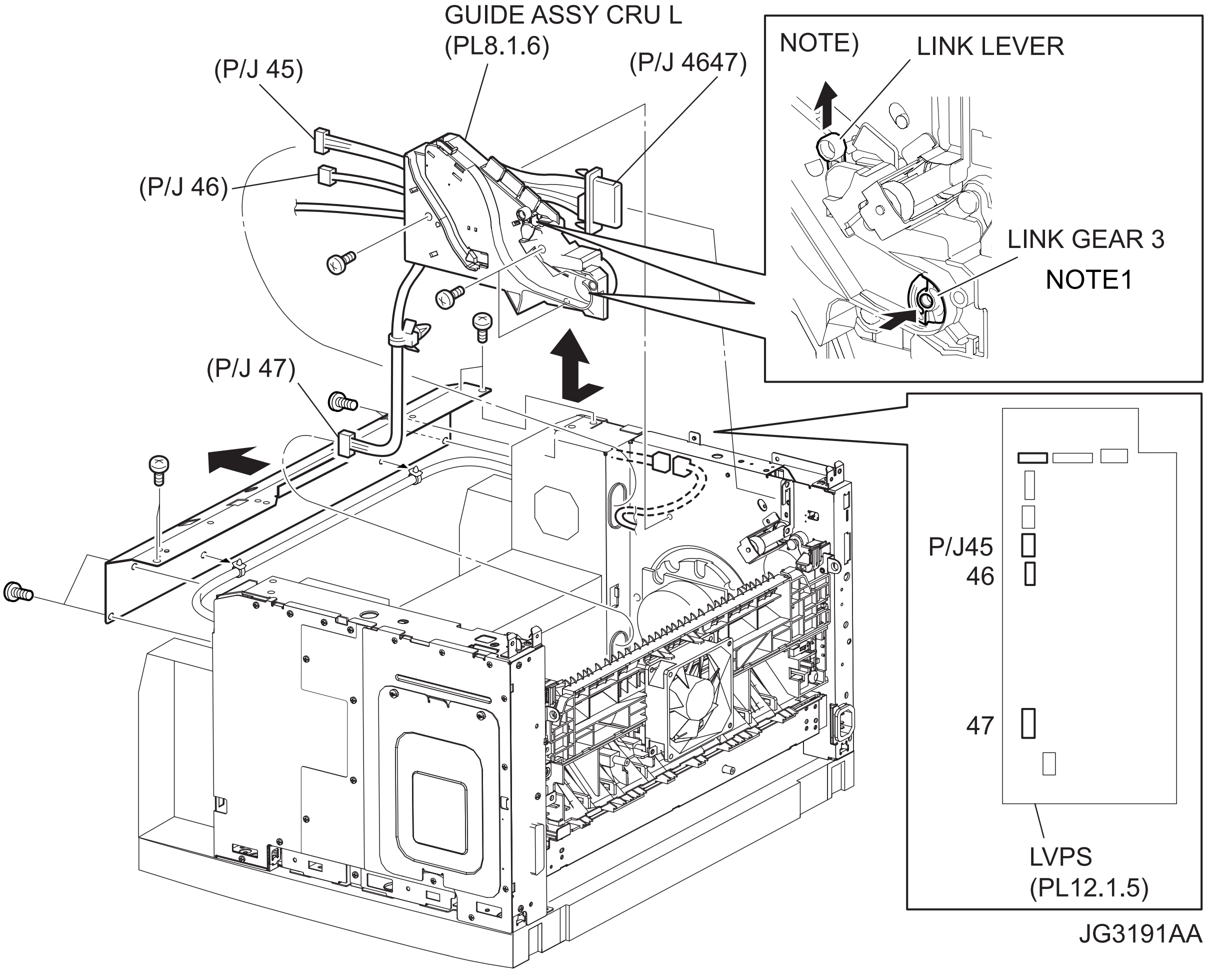
NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

4) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
5) Install the DUCT FRONT (PL8.1.4). (RRP8.2)
6) Install the COVER FRONT (PL1.1.5). (RRP1.5)
7) Install the COVER TOP (PL1.1.7). (RRP1.4)
8) Install the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
9) Install the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
10) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
11) Install the COVER LEFT (PL1.1.6). (RRP1.3)
12) Install the COVER REAR (PL1.1.3). (RRP1.1)

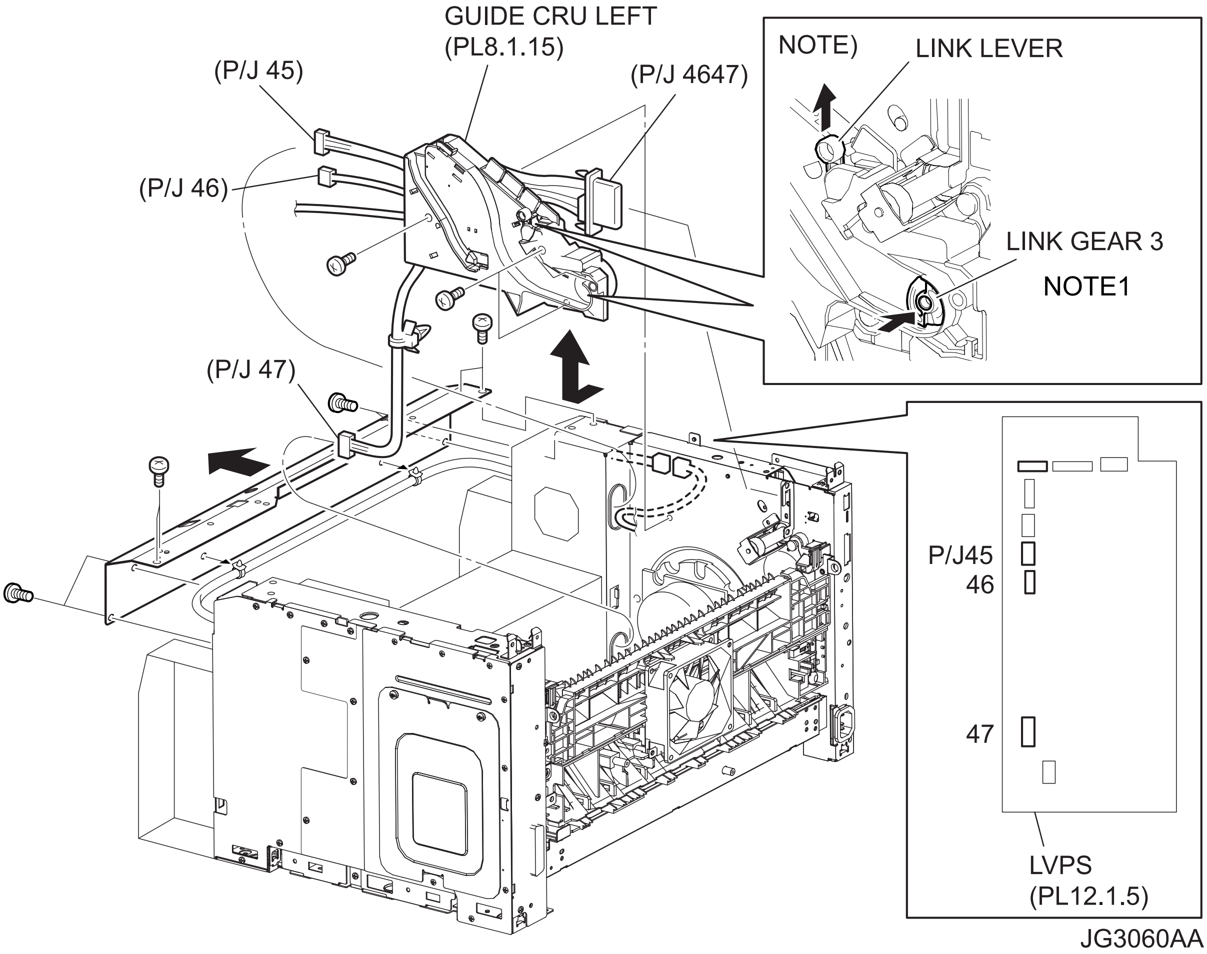
NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

13) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)

RRP8.4 GUIDE CRU LEFT (PL8.1.15)


GUIDE ASSY CRU L
(PL8.1.6)
(P/J 45)
(P/J 4647)
(P/J 46)
(P/J 47)
NOTE)
LINK LEVER
LINK GEAR 3
NOTE1
P/J45
46
47
LVPS
(PL12.1.5)
JG3191AA

(34PPM)


GUIDE CRU LEFT
(PL8.1.15)
(P/J 45)
(P/J 4647)
(P/J 46)
(P/J 47)
NOTE)
LINK LEVER
LINK GEAR 3
NOTE1
P/J45
46
47
LVPS
(PL12.1.5)
JG3060AA

(24PPM)

34PPM

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
6) Remove the 500 EXIT ASSY (PL10.1.2). (RRP10.2)
7) Remove the COVER TOP (PL1.1.7). (RRP1.4)
8) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
9) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
10) Remove the BTR ASSY (PL8.1.21). (RRP8.10)
11) Remove the GUIDE TRAY LEFT (PL7.1.7). (RRP7.8)
12) Remove the DUCT FRONT (PL8.1.4). (RRP8.2)
13) Remove the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

14) Remove the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
15) While lifting up the 150 FEEDER ASSY, remove the MOTOR COVER (PL11.1.1). (RRP11.1)
16) Remove the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
17) Remove the connector (P/J4647) of the HARNESS ASSY FUSER (PL8.1.17) from the frame.
18) Remove the harness clamper which holding the HARNESS ASSY FUSER attached to the GUIDE CRU LEFT to the frame.
19) Disconnect the connector (P/J141) of the INTERLOCK S/W 5V from the HARNESS ASSY LVPS (PL12.1.1).
20) Disconnect the connector (P/J45) of the INTERLOCK S/W 24V from the LVPS (PL12.1.5).
21) Disconnect the connectors (P/J46 and P/J47) of the HARNESS ASSY FUSER from the LVPS.
22) Remove the 3 screws (gold, 6mm) securing the GUIDE CRU LEFT to the frame.
23) Remove the GUIDE CRU LEFT from the frame.

NOTE **When removing GUIDE CRU LEFT, pressing LINK GEAR 3 in the direction of the arrow helps to remove GUIDE CRU LEFT easily.**

Replacement

1) Install the GUIDE CRU LEFT to the frame.

NOTE **When installing, make sure that the LEVER LINK (PL8.1.29) is attached to the GUIDE CRU LEFT.**

2) Install the GUIDE CRU LEFT to the frame using the 3 screws (gold, 6mm).

NOTE **After installing the GUIDE CRU LEFT, touch the LINK GEAR 3 with your finger. Make sure that your finger can feel the LINK GEAR 3 move inward, when the LEVER LINK is pulled up.**

3) Connect the connectors (P/J46 and P/J47) of the HARNESS ASSY FUSER to the LVPS (PL12.1.5).
4) Connect the connector (P/J45) of the INTERLOCK S/W 24V to the LVPS.
5) Connect the connector (P/J141) of the INTERLOCK S/W 5V to the HARNESS ASSY LVPS (PL12.1.1).

6) Secure the HARNESS ASSY FUSER (PL8.1.17) attached to the GUIDE CRU LEFT to the frame using harness clamper.
7) Install the connector (P/J4647) of the HARNESS ASSY FUSER to the frame.
8) Install the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
9) While lifting up the 150 FEEDER ASSY, install the MOTOR COVER (PL11.1.1). (RRP11.1)
10) Install the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
11) Install the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE

Never give any impact to the ROS ASSY with a screwdriver or other tools.

12) Install the DUCT FRONT (PL8.1.4). (RRP8.2)
13) Install the GUIDE TRAY LEFT (PL7.1.7). (RRP7.8)
14) Install the BTR ASSY (PL8.1.21). (RRP8.10)
15) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
16) Install the COVER FRONT (PL1.1.5). (RRP1.5)
17) Install the COVER TOP (PL1.1.7). (RRP1.4)
18) Install the 500 EXIT ASST (PL10.1.2). (RRP10.2)
19) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
20) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
21) Install the COVER LEFT (PL1.1.6). (RRP1.3)
22) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

There are 2 kinds of screws, make sure they are put in the right place.

23) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

24PPM

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
6) Remove the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
7) Remove the COVER TOP (PL1.1.7). (RRP1.4)
8) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
9) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
10) Remove the BTR ASSY (PL8.1.21). (RRP8.10)
11) Remove the GUIDE TRAY LEFT (PL6.1.7 or 7.1.7). (RRP6.8 or 7.8)
12) Remove the DUCT FRONT (PL8.1.4). (RRP8.2)
13) Remove the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

14) Remove the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
15) While lifting up the 150 FEEDER ASSY, remove the MOTOR COVER (PL11.1.1). (RRP11.1)
16) Remove the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
17) Remove the connector (P/J4647) of the HARNESS ASSY FUSER (PL8.1.17) from the frame.
18) Remove the harness clamper which holding the HARNESS ASSY FUSER attached to the GUIDE CRU LEFT to the frame.
19) Disconnect the connector (P/J141) of the INTERLOCK S/W 5V from the HARNESS ASSY LVPS (PL12.1.1).
20) Disconnect the connector (P/J45) of the INTERLOCK S/W 24V from the LVPS (PL12.1.5).
21) Disconnect the connectors (P/J46 and P/J47) of the HARNESS ASSY FUSER from the LVPS.
22) Remove the 3 screws (gold, 6mm) securing the GUIDE CRU LEFT to the frame.
23) Remove the GUIDE CRU LEFT from the frame.

NOTE **When removing GUIDE CRU LEFT, pressing LINK GEAR 3 in the direction of the arrow helps to remove GUIDE CRU LEFT easily.**

Replacement

1) Install the GUIDE CRU LEFT to the frame.

NOTE **When installing, make sure that the LEVER LINK (PL8.1.29) is attached to the GUIDE CRU LEFT.**

2) Install the GUIDE CRU LEFT to the frame using the 3 screws (gold, 6mm).

NOTE **After installing the GUIDE CRU LEFT, touch the LINK GEAR 3 with your finger. Make sure that your finger can feel the LINK GEAR 3 move inward, when the LEVER LINK is pulled up.**

3) Connect the connectors (P/J46 and P/J47) of the HARNESS ASSY FUSER to the LVPS (PL12.1.5).
4) Connect the connector (P/J45) of the INTERLOCK S/W 24V to the LVPS.
5) Connect the connector (P/J141) of the INTERLOCK S/W 5V to the HARNESS ASSY LVPS (PL12.1.1).

6) Secure the HARNESS ASSY FUSER (PL8.1.17) attached to the GUIDE CRU LEFT to the frame using harness clamper.
7) Install the connector (P/J4647) of the HARNESS ASSY FUSER (PL8.1.17) to the frame.
8) Install the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
9) While lifting up the 150 FEEDER ASSY, install the MOTOR COVER (PL11.1.1). (RRP11.1)
10) Install the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
11) Install the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE

Never give any impact to the ROS ASSY with a screwdriver or other tools.

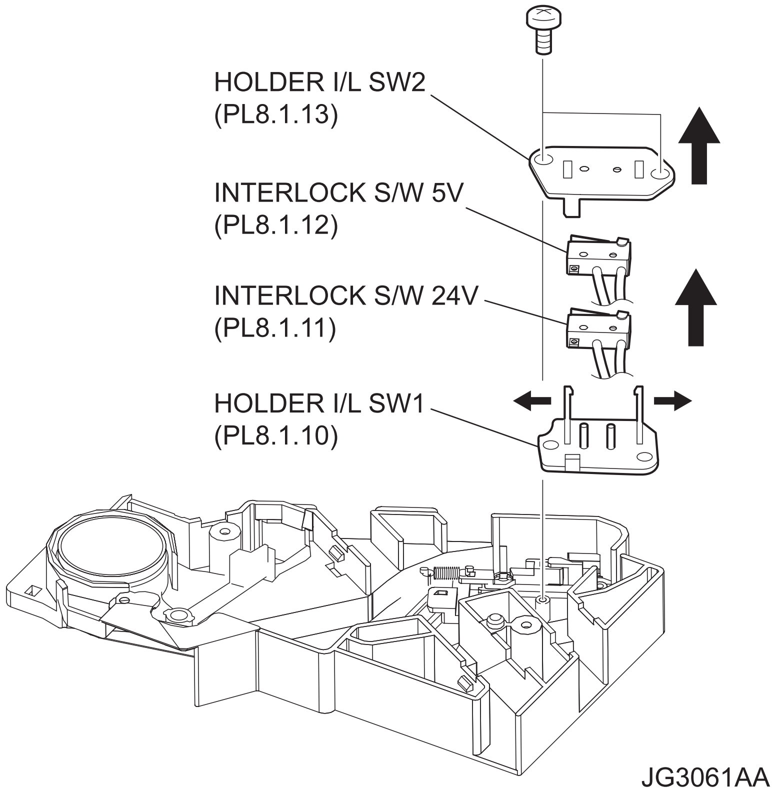
12) Install the DUCT FRONT (PL8.1.4). (RRP8.2)
13) Install the GUIDE TRAY LEFT (PL6.1.7 or PL7.1.7). (RRP6.8 or 7.8)
14) Install the BTR ASSY (PL8.1.21). (RRP8.10)
15) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
16) Install the COVER FRONT (PL1.1.5). (RRP1.5)
17) Install the COVER TOP (PL1.1.7). (RRP1.4)
18) Install the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
19) Install the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
20) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
21) Install the COVER LEFT (PL1.1.6). (RRP1.3)
22) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

There are 2 kinds of screws, make sure they are put in the right place.

23) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)

RRP8.5 INTERLOCK S/W 24V (PL8.1.11), INTERLOCK S/W 5V (PL8.1.12)


HOLDER I/L SW2
(PL8.1.13)
INTERLOCK S/W 5V
(PL8.1.12)
INTERLOCK S/W 24V
(PL8.1.11)
HOLDER I/L SW1
(PL8.1.10)
JG3061AA

34PPM

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
5) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
6) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
7) Remove the 500 EXIT ASSY (PL10.1.2). (RRP10.2)
8) Remove the COVER TOP (PL1.1.7). (RRP1.4)
9) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
10) Remove the BTR ASSY (PL8.1.21). (RRP8.10)
11) Remove the DUCT FRONT (PL8.1.4). (RRP8.2)
12) Remove the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

13) Remove the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
14) Remove the GUIDE TRAY LEFT (PL7.1.7). (RRP7.8)
15) Remove the MOTOR COVER (PL11.1.1). (RRP11.1)
16) Remove the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
17) Remove the GUIDE CRU LEFT (PL8.1.15). (RRP8.4)
18) Remove the COVER GUIDE CRU (PL8.1.16) and HARNESS ASSY FUSER (PL8.1.17) from the GUIDE CRU LEFT. (RRP8.7)
19) Remove the 2 screws (gold tapping, 6mm) securing the HOLDER I/L SW2 (PL8.1.13) to the GUIDE CRU LEFT.
20) Remove the HOLDER I/L SW2.
21) Release the hook of the HOLDER I/L SW1 (PL8.1.10), and remove the INTERLOCK S/W 24V and INTERLOCK S/W 5V.

Replacement

1) Install the INTERLOCK S/W 24V and INTERLOCK S/W 5V to the HOLDER I/L SW1 (PL8.1.10) and secure them with hooks.
2) Install the HOLDER I/L SW2 (PL8.1.13) to the GUIDE CRU LEFT (PL8.1.15) using the 2 screws (gold tapping, 6mm).
3) Install the COVER GUIDE CRU (PL8.1.16) and HARNESS ASSY FUSER (PL8.1.17) to the GUIDE CRU LEFT.
4) Install the GUIDE CRU LEFT. (RRP8.4)

NOTE **When installing, make sure that the LEVER LINK (PL8.1.29) is attached to the GUIDE CRU LEFT.**

NOTE **After installing the GUIDE CRU LEFT, touch the LINK GEAR 3 with your finger. Make sure that your finger can feel the LINK GEAR 3 move inward, when the LEVER LINK is pulled up.**

5) Install the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
6) Install the MOTOR COVER (PL11.1.1). (RRP11.1)
7) Install the GUIDE TRAY LEFT (PL7.1.7). (RRP7.8)
8) Install the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)

9) Install the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

10) Install the DUCT FRONT (PL8.1.4). (RRP8.2)
11) Install the COVER FRONT (PL1.1.5). (RRP1.5)
12) Install the COVER TOP (PL1.1.7). (RRP1.4)
13) Install the 500 EXIT ASST (PL10.1.2). (RRP10.2)
14) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
15) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
16) Install the COVER LEFT (PL1.1.6). (RRP1.3)
17) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
18) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

19) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)
20) Install the BTR ASSY (PL8.1.21). (RRP8.10)

24PPM

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.5)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
5) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
6) Remove the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
7) Remove the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
8) Remove the COVER TOP (PL1.1.7). (RRP1.4)
9) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
10) Remove the BTR ASSY (PL8.1.21). (RRP8.10)
11) Remove the GUIDE TRAY LEFT (PL6.1.7 or PL7.1.7). (RRP6.8 or PL7.8)
12) Remove the DUCT FRONT (PL8.1.4). (RRP8.2)
13) Remove the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

14) Remove the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
15) Remove the MOTOR COVER (PL11.1.1). (RRP11.1)
16) Remove the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
17) Remove the GUIDE CRU LEFT (PL8.1.15). (RRP8.4)
18) Remove the COVER GUIDE CRU (PL8.1.16) and HARNESS ASSY FUSER (PL8.1.17) from the GUIDE CRU LEFT. (RRP8.7)
19) Remove the 2 screws (gold tapping, 6mm) securing the HOLDER I/L SW2 (PL8.1.13) to the GUIDE CRU LEFT.
20) Remove the HOLDER I/L SW2.
21) Release the hook of the HOLDER I/L SW1 (PL8.1.10), and remove the INTERLOCK S/W 24V and INTERLOCK S/W 5V.

Replacement

1) Install the INTERLOCK S/W 24V and INTERLOCK S/W 5V to the HOLDER I/L SW1 (PL8.1.10) and secure them with hooks.
2) Install the HOLDER I/L SW2 (PL8.1.13) to the GUIDE CRU LEFT (PL8.1.15) using the 2 screws (gold tapping, 6mm).
3) Install the COVER GUIDE CRU (PL8.1.16) and HARNESS ASSY FUSER (PL8.1.17) to the GUIDE CRU LEFT.
4) Install the GUIDE CRU LEFT (PL8.1.15). (RRP8.4)

NOTE **When installing, make sure that the LEVER LINK (PL8.1.29) is attached to the GUIDE CRU LEFT.**

NOTE **After installing the GUIDE CRU LEFT, touch the LINK GEAR 3 with your finger. Make sure that your finger can feel the LINK GEAR 3 move inward, when the LEVER LINK is pulled up.**

5) Install the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
6) Install the MOTOR COVER (PL11.1.1). (RRP11.1)
7) Install the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
8) Install the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

9) Install the DUCT FRONT (PL8.1.4). (RRP8.2)
10) Install the GUIDE TRAY L EFT (PL6.1.7 or PL7.1.7). (RRP6.8 or PL7.8)
11) Install the COVER FRONT (PL1.1.5). (RRP1.5)
12) Install the COVER TOP (PL1.1.7). (RRP1.4)
13) Install the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
14) Install the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
15) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
16) Install the COVER LEFT (PL1.1.6). (RRP1.3)
17) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
18) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

19) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)
20) Install the BTR ASSY (PL8.1.21). (RRP8.10)

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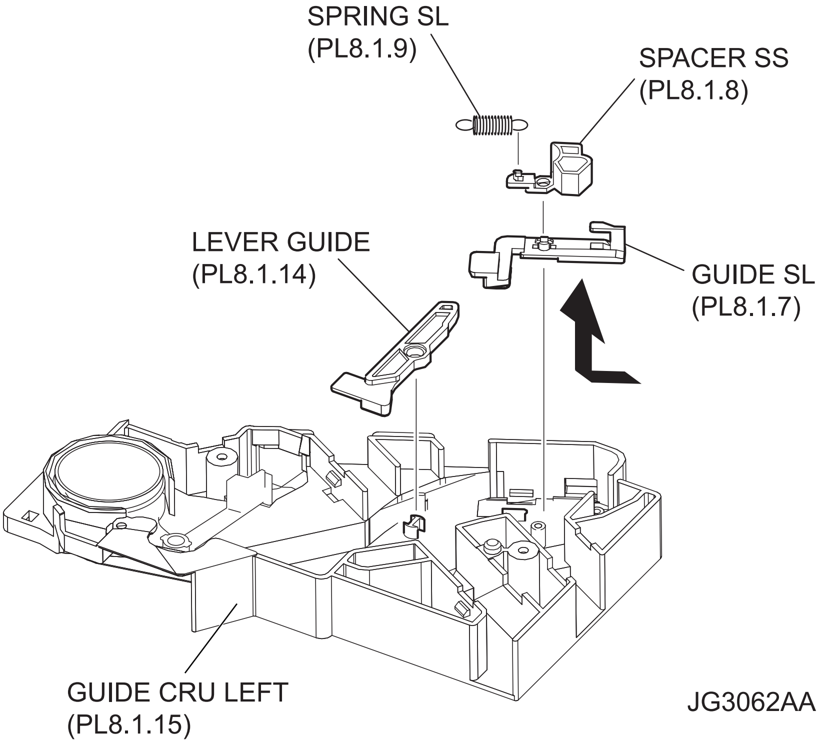
RRP8.6   LEVER GUIDE (PL8.1.14)


SPRING SL
(PL8.1.9)
SPACER SS
(PL8.1.8)
LEVER GUIDE
(PL8.1.14)
GUIDE SL
(PL8.1.7)
GUIDE CRU LEFT
(PL8.1.15)
JG3062AA

34PPM

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
5) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
6) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
7) Remove the 500 EXIT ASSY (PL10.1.2). (RRP10.2)
8) Remove the COVER TOP (PL1.1.7). (RRP1.4)
9) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
10) Remove the BTR ASSY (PL8.1.21). (RRP8.10)
11) Remove the DUCT FRONT (PL8.1.4). (RRP8.2)
12) Remove the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

13) Remove the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
14) Remolve the GUIDE TRAY LEFT (PL7.1.7). (RRP7.8)
15) Remove the MOTOR COVER (PL11.1.1). (RRP11.1)
16) Remove the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
17) Remove the GUIDE CRU LEFT (PL8.1.15). (RRP8.4)
18) Remove the COVER GUIDE CRU (PL8.1.16) and HARNESS ASSY FUSER (PL8.1.17) from the GUIDE CRU LEFT. (RRP8.7)
19) Remove the INTERLOCK S/W 24V (PL8.1.11) and INTERLOCK S/W 5V (PL8.1.12). (RRP8.5)
20) Remove the SPRING SL (PL8.1.9) from the GUIDE CRU LEFT.
21) Remove the SPACER SS (PL8.1.8) from the GUIDE CRU LEFT.
22) Remove the GUIDE SL (PL8.1.7) from the GUIDE CRU LEFT.
23) Remove the LEVER GUIDE from the GUIDE CRU LEFT.

Replacement

1) Install the LEVER GUIDE to the GUIDE CRU LEFT(PL8.1.15).
2) Install the GUIDE SL (PL8.1.7) to the GUIDE CRU LEFT.
3) Install the SPACER SS (PL8.1.8) to the GUIDE CRU LEFT.
4) Install the SPRING SL (PL8.1.9) to the GUIDE CRU LEFT.
5) Install the INTERLOCK S/W 24V (PL8.1.11) and INTERLOCK S/W 5V (PL8.1.12). (RRP8.5)
6) Install the COVER GUIDE CRU (PL8.1.16) and HARNESS ASSY FUSER (PL8.1.17). (RRP8.7)
7) Install the GUIDE CRU LEFT (PL8.1.15). (RRP8.4)

NOTE **When installing, make sure that the LEVER LINK (PL8.1.29) is attached to the GUIDE CRU LEFT.**

NOTE **After installing the GUIDE CRU LEFT, touch the LINK GEAR 3 with your finger. Make sure that your finger can feel the LINK GEAR 3 move inward, when the LEVER LINK is pulled up.**

8) nstall the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
9) Install the MOTOR COVER (PL11.1.1). (RRP11.1)
10) Install the GUIDE TRAY LEFT (PL7.1.7). (RRP7.8)
11) Install the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)

12) Install the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE

Never give any impact to the ROS ASSY with a screwdriver or other tools.

13) Install the DUCT FRONT (PL8.1.4). (RRP8.2)
14) Install the COVER FRONT (PL1.1.5). (RRP1.5)
15) Install the COVER TOP (PL1.1.7). (RRP1.4)
16) Install the 500 EXIT ASST (PL10.1.2). (RRP10.2)
17) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
18) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
19) Install the COVER LEFT (PL1.1.6). (RRP1.3)
20) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
21) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

There are 2 kinds of screws, make sure they are put in the right place.

22) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)
23) Install the BTR ASSY (PL8.1.21). (RRP8.10)

24PPM

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.5)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
5) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
6) Remove the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
7) Remove the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
8) Remove the COVER TOP (PL1.1.7). (RRP1.4)
9) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
10) Remove the BTR ASSY (PL8.1.21). (RRP8.10)
11) Remove the GUIDE TRAY LEFT (PL6.1.7 or PL7.1.7). (RRP6.8 or RRP7.8)
12) Remove the DUCT FRONT (PL8.1.4). (RRP8.2)
13) Remove the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

14) Remove the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
15) Remove the MOTOR COVER (PL11.1.1). (RRP11.1)
16) Remove the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
17) Remove the GUIDE CRU LEFT (PL8.1.15). (RRP8.4)
18) Remove the COVER GUIDE CRU (PL8.1.16) and HARNESS ASSY FUSER (PL8.1.17) from the GUIDE CRU LEFT. (RRP8.7)
19) Remove the INTERLOCK S/W 24V (PL8.1.11) and INTERLOCK S/W 5V (PL8.1.12). (RRP8.5)
20) Remove the SPRING SL (PL8.1.9) from the GUIDE CRU LEFT (PL8.1.15).
21) Remove the SPACER SS (PL8.1.8) from the GUIDE CRU LEFT.
22) Remove the GUIDE SL (PL8.1.7) from the GUIDE CRU LEFT.
23) Remove the LEVER GUIDE from the GUIDE CRU LEFT.

Replacement

1) Install the LEVER GUIDE to the GUIDE CRU LEFT (PL8.1.15).
2) Install the GUIDE SL (PL8.1.7) to the GUIDE CRU LEFT.
3) Install the SPACER SS (PL8.1.8) to the GUIDE CRU LEFT.
4) Install the SPRING SL (PL8.1.9) to the GUIDE CRU LEFT .
5) Install the INTERLOCK S/W 24V (PL8.1.11) and INTERLOCK S/W 5V (PL8.1.12). (RRP8.5)
6) Install the COVER GUIDE CRU (PL8.1.16) and HARNESS ASSY FUSER (PL8.1.17) to the GUIDE ASSY CRU L. (RRP8.7)
7) Install the GUIDE CRU LEFT (PL8.1.15). (RRP8.4)

NOTE **When installing, make sure that the LEVER LINK (PL8.1.29) is attached to the GUIDE CRU LEFT.**

NOTE **After installing the GUIDE CRU LEFT, touch the LINK GEAR 3 with your finger. Make sure that your finger can feel the LINK GEAR 3 move inward, when the LEVER LINK is pulled up.**

8) Install the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
9) Install the MOTOR COVER (PL11.1.1). (RRP11.1)
10) Install the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)

11) Install the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

12) Install the DUCT FRONT (PL8.1.4). (RRP8.2)
13) Install the GUIDE TRAY L EFT (PL6.1.7 or PL7.1.7). (RRP6.8 or PL7.8)
14) Install the COVER FRONT (PL1.1.5). (RRP1.5)
15) Install the COVER TOP (PL1.1.7). (RRP1.4)
16) Install the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
17) Install the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
18) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
19) Install the COVER LEFT (PL1.1.6). (RRP1.3)
20) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
21) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

22) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)
23) Install the BTR ASSY (PL8.1.21). (RRP8.10)

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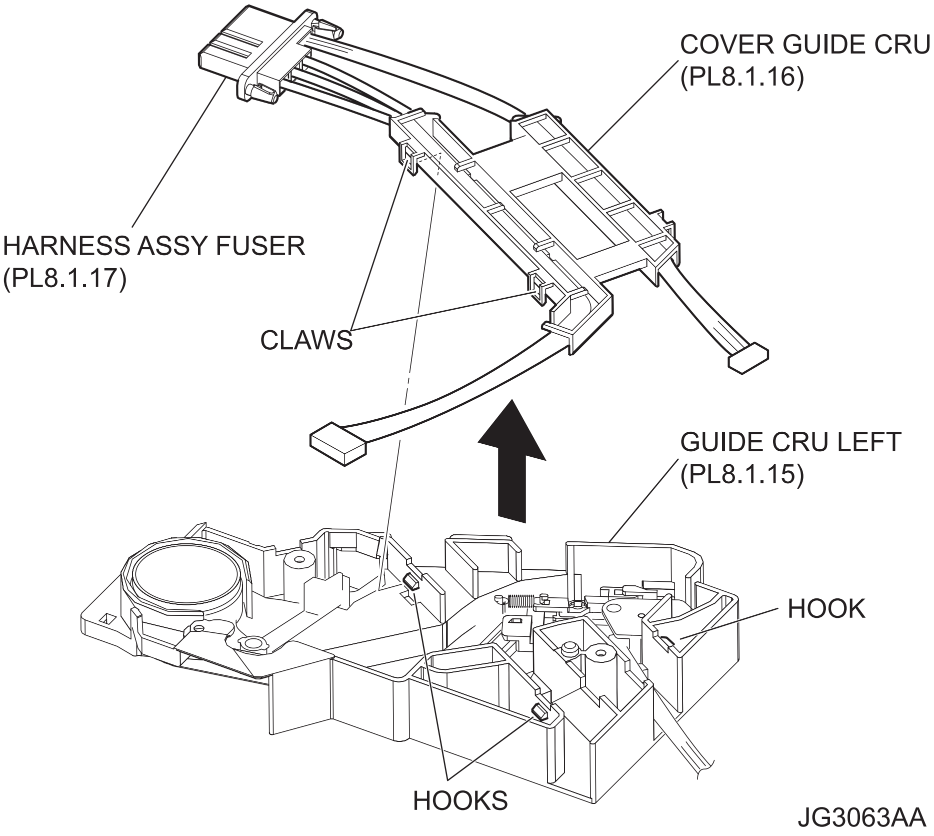
RRP8.7 HARNESS ASSY FUSER (PL8.1.17)


COVER GUIDE CRU
(PL8.1.16)
HARNESS ASSY FUSER
(PL8.1.17)
CLAWS
GUIDE CRU LEFT
(PL8.1.15)
HOOK
HOOKS
JG3063AA

34PPM

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
5) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
6) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
7) Remove the 500 EXIT ASSY (PL10.1.2). (RRP10.2)
8) Remove the COVER TOP (PL1.1.7). (RRP1.4)
9) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
10) Remove the BTR ASSY (PL8.1.21). (RRP8.10)
11) Remove the DUCT FRONT (PL8.1.4). (RRP8.2)
12) Remove the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

13) Remove the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
14) Remolve the GUIDE TRAY LEFT (PL7.1.7). (RRP7.8)
15) Remove the MOTOR COVER (PL11.1.1). (RRP11.1)
16) Remove the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
17) Remove the GUIDE CRU LEFT (PL8.1.15). (RRP8.4)
18) Release the hooks securing the COVER GUIDE CRU (PL8.1.16) to the GUIDE CRU LEFT, and remove the COVER GUIDE CRU together with the HARNESS ASSY FUSER.

NOTE **Be careful handling the hooks of the GUIDE CRU LEFT. They are fragile and could break if widen them to much.**

Replacement

1) Install the COVER GUIDE CRU (PL8.1.16) together with the HARNESS ASSY FUSER to the GUIDE CRU LEFT (PL18.1.15).
2) Install the GUIDE CRU LEFT (PL8.1.15). (RRP8.4)

NOTE **When installing, make sure that the LEVER LINK (PL8.1.29) is attached to the GUIDE CRU LEFT.**

NOTE **After installing the GUIDE CRU LEFT, touch the LINK GEAR 3 with your finger. Make sure that your finger can feel the LINK GEAR 3 move inward, when the LEVER LINK is pulled up.**

3) nstall the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
4) Install the MOTOR COVER (PL11.1.1). (RRP11.1)
5) Install the GUIDE TRAY LEFT (PL7.1.7). (RRP7.8)
6) Install the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
7) Install the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

8) Install the DUCT FRONT (PL8.1.4). (RRP8.2)
9) Install the COVER FRONT (PL1.1.5). (RRP1.5)

10) Install the COVER TOP (PL1.1.7). (RRP1.4)
11) Install the 500 EXIT ASST (PL10.1.2). (RRP10.2)
12) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
13) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
14) Install the COVER LEFT (PL1.1.6). (RRP1.3)
15) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
16) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

There are 2 kinds of screws, make sure they are put in the right place.

17) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)
18) Install the BTR ASSY (PL8.1.21). (RRP8.10)

24PPM

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.5)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
5) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
6) Remove the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
7) Remove the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
8) Remove the COVER TOP (PL1.1.7). (RRP1.4)
9) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
10) Remove the BTR ASSY (PL8.1.21). (RRP8.10)
11) Remove the GUIDE TRAY LEFT (PL6.1.7 or PL7.1.7). (RRP6.8 or RRP7.8)
12) Remove the DUCT FRONT (PL8.1.4). (RRP8.2)
13) Remove the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

14) Remove the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
15) Remove the MOTOR COVER (PL11.1.1). (RRP11.1)
16) Remove the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
17) Remove the GUIDE CRU LEFT (PL8.1.15). (RRP8.4)
18) Release the hooks securing the COVER GUIDE CRU (PL8.1.16) to the GUIDE CRU LEFT, and remove the COVER GUIDE CRU together with the HARNESS ASSY FUSER.

NOTE **Be careful handling the hooks of the GUIDE CRU LEFT. They are fragile and could break if widen them to much.**

Replacement

1) Install the COVER GUIDE CRU (PL8.1.16) together with the HARNESS ASSY FUSER to the GUIDE CRU LEFT (PL18.1.15).
2) Install the GUIDE CRU LEFT (PL8.1.15). (RRP8.4)

NOTE **When installing, make sure that the LEVER LINK (PL8.1.29) is attached to the GUIDE CRU LEFT.**

NOTE **After installing the GUIDE CRU LEFT, touch the LINK GEAR 3 with your finger. Make sure that your finger can feel the LINK GEAR 3 move inward, when the LEVER LINK is pulled up.**

3) Install the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
4) Install the MOTOR COVER (PL11.1.1). (RRP11.1)
5) Install the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
6) Install the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

7) Install the DUCT FRONT (PL8.1.4). (RRP8.2)
8) Install the GUIDE TRAY L EFT (PL6.1.7 or PL7.1.7). (RRP6.8 or PL7.8)
9) Install the COVER FRONT (PL1.1.5). (RRP1.5)

10) Install the COVER TOP (PL1.1.7). (RRP1.4)
11) Install the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
12) Install the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
13) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
14) Install the COVER LEFT (PL1.1.6). (RRP1.3)
15) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
16) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

There are 2 kinds of screws, make sure they are put in the right place.

17) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)
18) Install the BTR ASSY (PL8.1.21). (RRP8.10)

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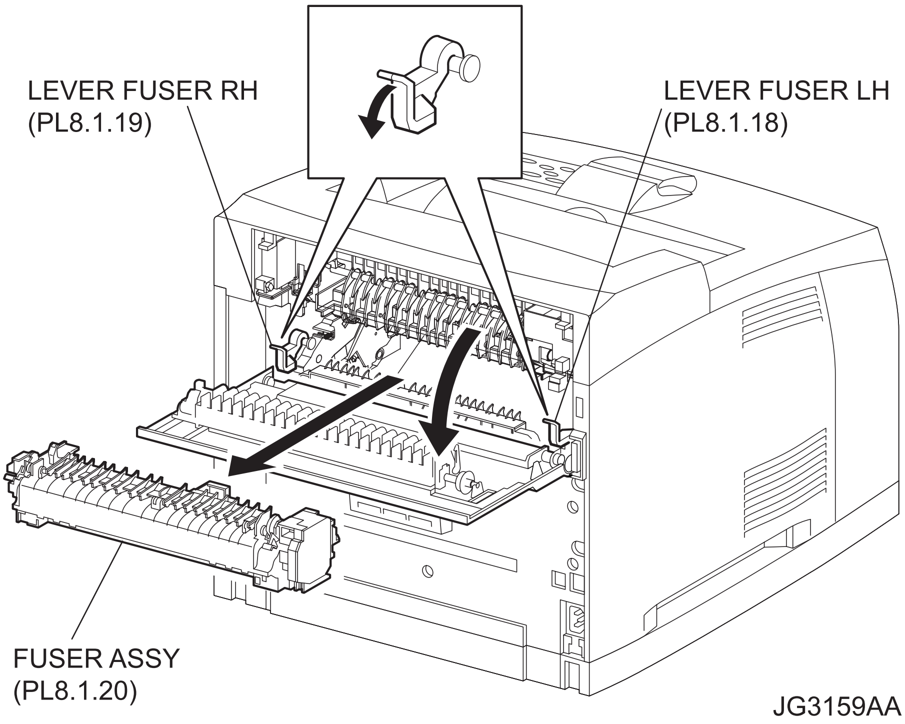
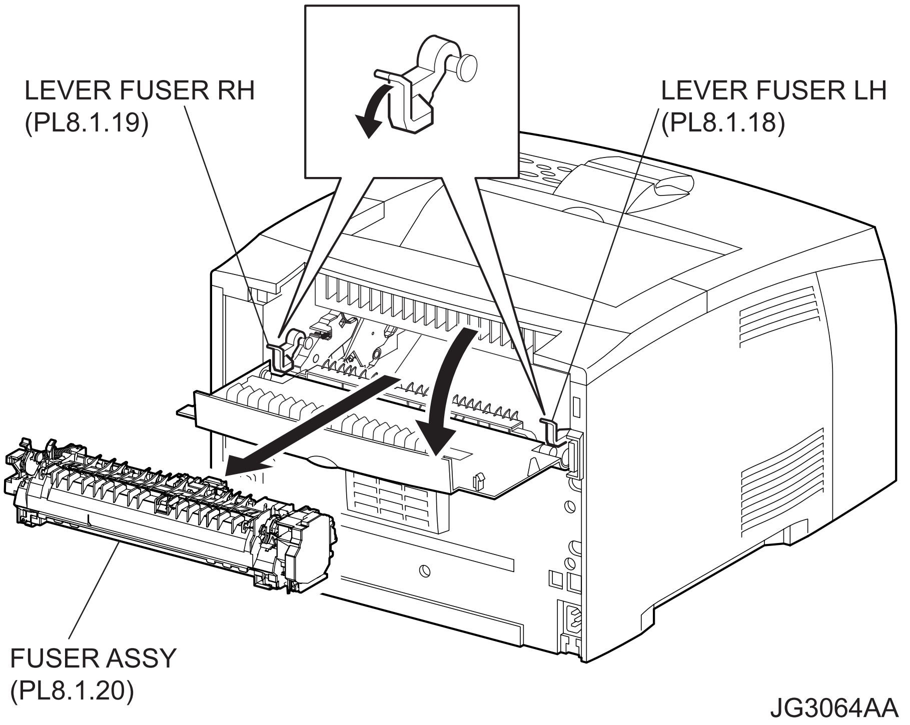
RRP8.8 FUSER ASSY (PL8.1.20)


LEVER FUSER RH
(PL8.1.19)
LEVER FUSER LH
(PL8.1.18)
FUSER ASSY
(PL8.1.20)
JG3159AA

(34PPM)


LEVER FUSER RH
(PL8.1.19)
LEVER FUSER LH
(PL8.1.18)
FUSER ASSY
(PL8.1.20)
JG3064AA

(24PPM)

Removal

NOTE **Before performing the following procedures, make sure that the FUSER ASSY was cooled enough.**

1) Open the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12).
2) Push down the LEVER FUSER LH (PL8.1.18) and LEVER FUSER RH (PL8.1.19) in the direction of the arrow to release the lock of the FUSER ASSY.
3) Shift the FUSER ASSY in the direction of the arrow, and remove it from the printer.

Replacement

1) Shift the FUSER ASSY in the opposite direction of the arrow, and install it to the printer.
2) Lock the FUSER ASSY by pulling up the LEVER FUSER LH (PL8.1.18) and LEVER FUSER RH (PL8.1.19).
3) Close the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12).

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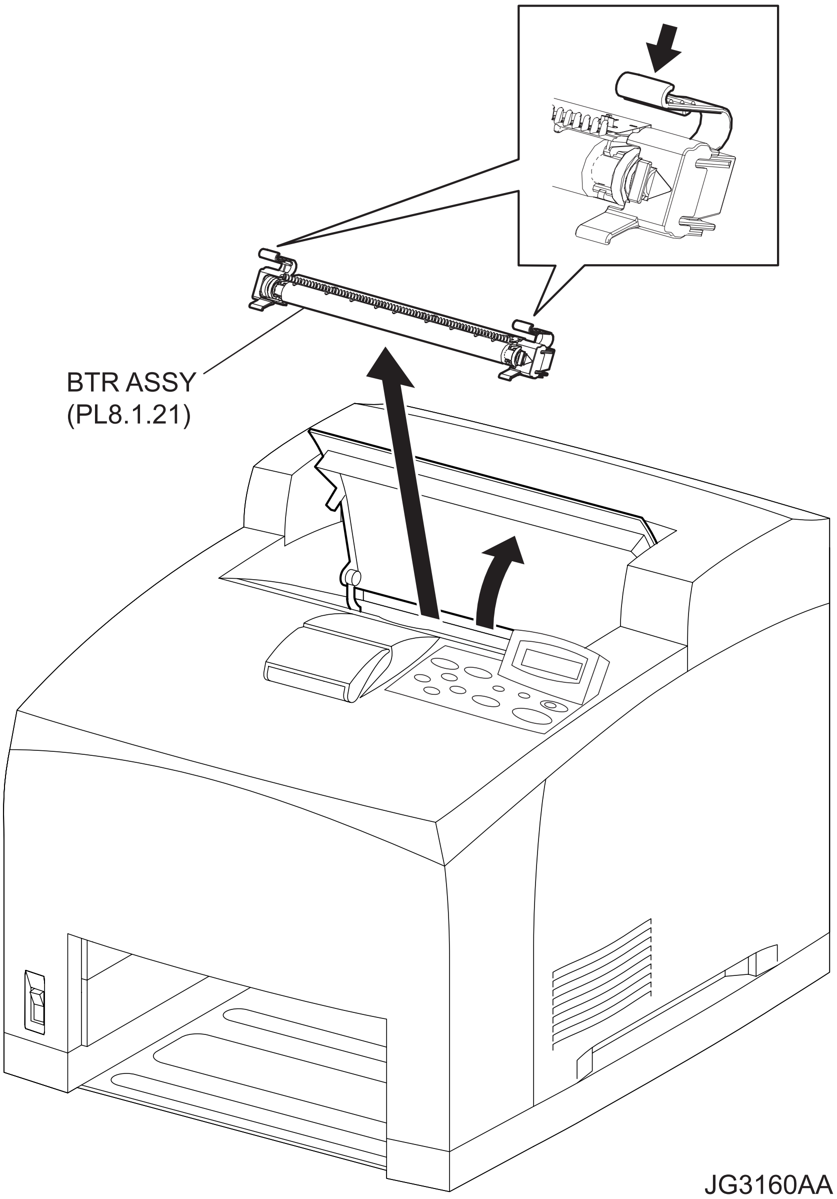
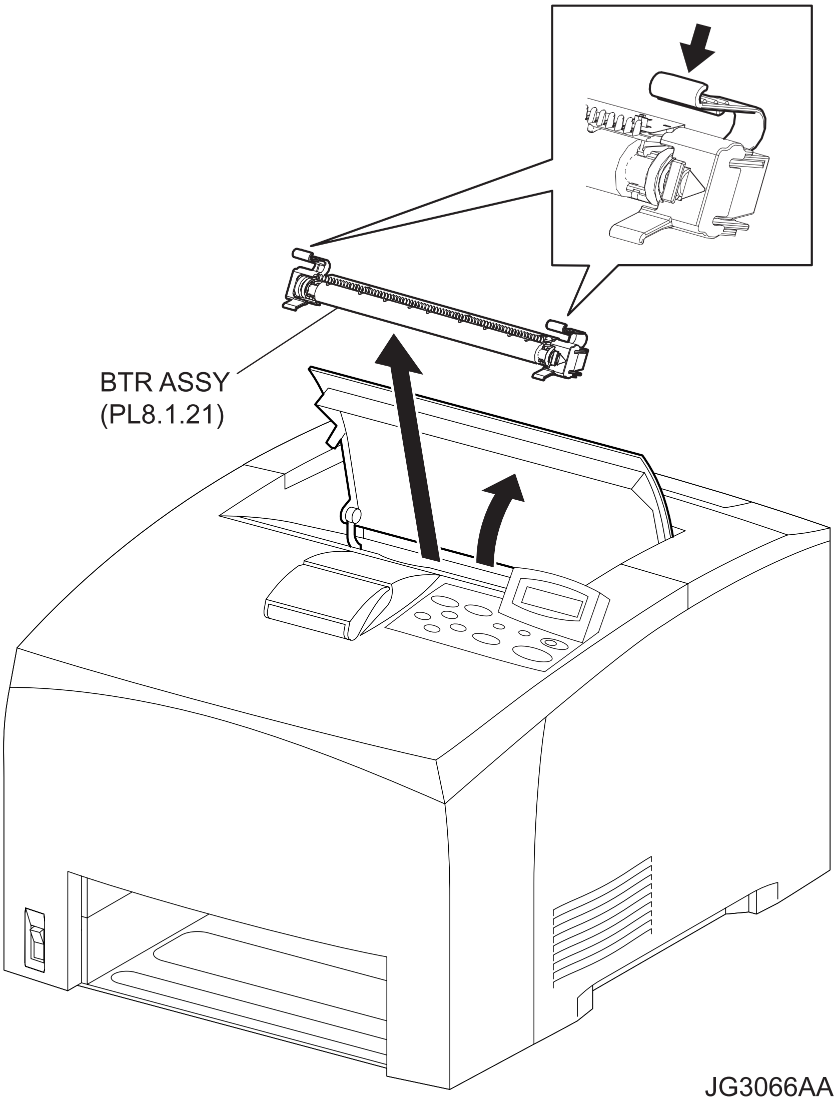
RRP8.10 BTR ASSY (PL8.1.21)]


BTR ASSY
(PL8.1.21)
JG3160AA

(34PPM)


BTR ASSY
(PL8.1.21)
JG3066AA

(24PPM)

Removal

1) Open the COVER OPEN (PL1.1.2).
2) Pinch the hooks of both ends of the BTR ASSY, and remove it from the printer.

NOTE **Pay extra care in handling of the BTR ASSY, not to give any stain or damage.**

Replacement

1) Pinch the hooks of both ends of the BTR ASSY, and install it to the printer.
2) Close the COVER OPEN (PL1.1.2).

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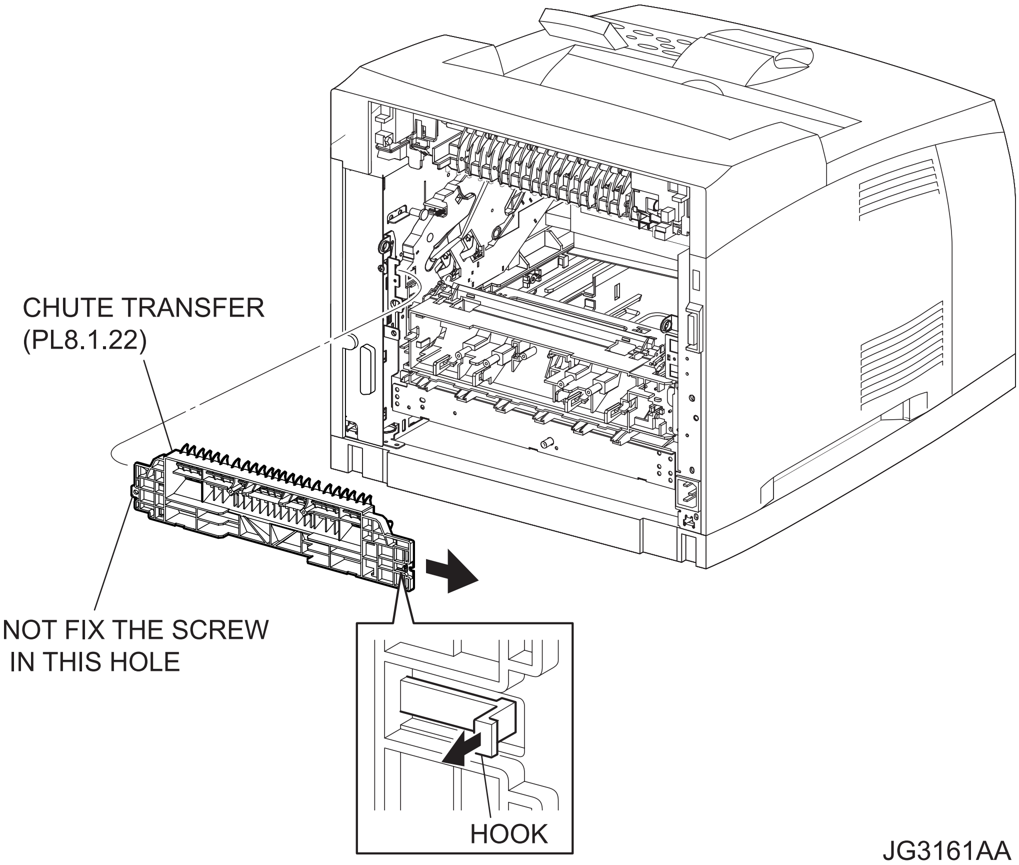
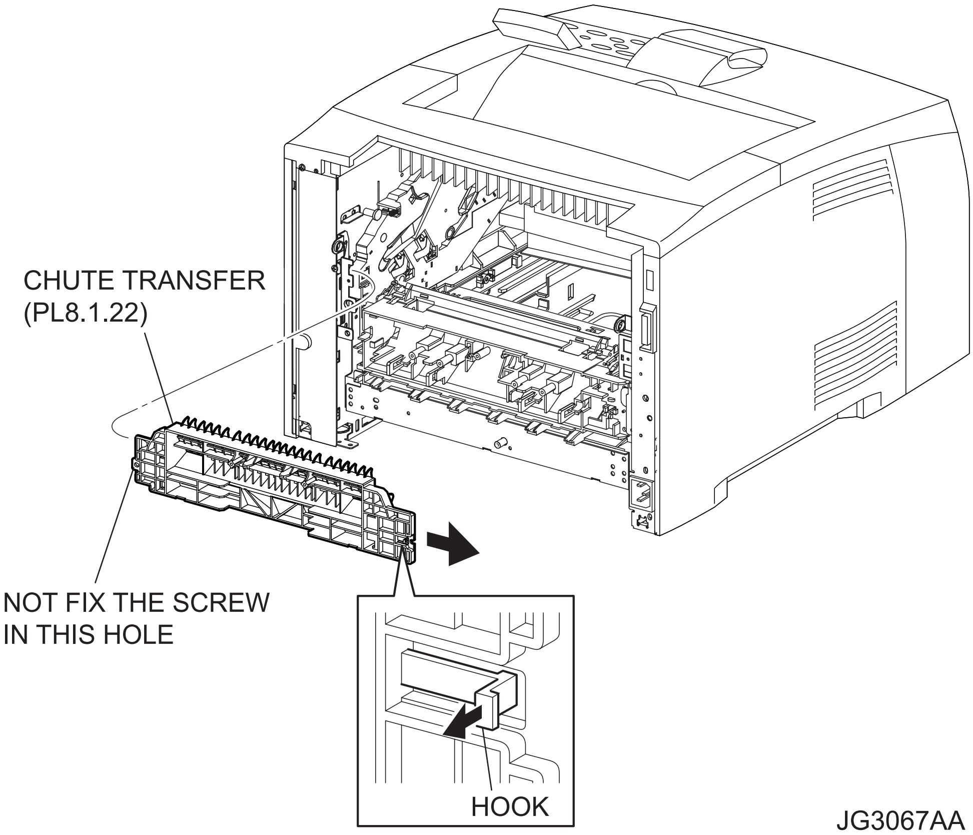
RRP8.11 CHUTE TRANSFER (PL8.1.22)


CHUTE TRANSFER
(PL8.1.22)
NOT FIX THE SCREW
IN THIS HOLE
HOOK
JG3161AA

(34PPM)


CHUTE TRANSFER
(PL8.1.22)
NOT FIX THE SCREW
IN THIS HOLE
HOOK
JG3067AA

(24PPM)

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Remove the BTR ASSY (PL8.1.21). (RRP8.10)
5) Remove the FAN MAIN (PL12.1.10). (RRP12.6)
6) Release the hook of the CHUTE TRANSFER.
7) Shift the CHUTE TRANSFER in the direction of the arrow, and remove it from the frame.

Replacement

1) Shift the CHUTE TRANSFER in the opposite direction of the arrow to install the frame, and secure it using a hook.

NOTE **Do not tighten the screw to the left side hole of the CHUTE TRANSFER.**

2) Install the FAN MAIN (PL12.1.10). (RRP12.6)
3) Install the BTR ASSY (PL8.1.21). (RRP8.10)
4) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
5) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

6) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)

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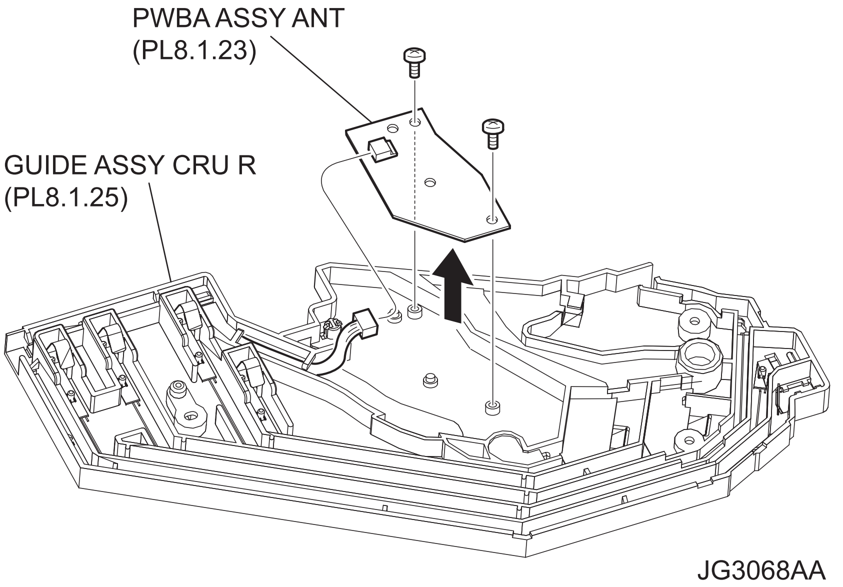
RRP8.12 PWBA ASSY ANT (PL8.1.23)


PWBA ASSY ANT
(PL8.1.23)
GUIDE ASSY CRU R
(PL8.1.25)
JG3068AA

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
5) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
6) Remove the COVER EXIT 500 (PL10.1.1)/CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP10.1/9.7)
7) Remove the 500 EXIT ASST (PL10.1.2)/CHUTE LW EXT2 ASSY (PL9.1.2). (RRP10.2/9.1)
8) Remove the COVER TOP (PL1.1.7). (RRP1.4)
9) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
10) Remove the BTR ASSY (PL8.1.21). (RRP8.10)
11) Remove the DUCT FRONT (PL8.1.4). (RRP8.2)
12) Remove the GUIDE ASSY CRU R (PL8.1.25). (RRP8.13)
13) Remove the 2 screws (gold tapping, 6mm) securing the PWBA ASSY ANT to the GUIDE ASSY CRU R.
14) Remove the PWBA ASSY ANT.
15) Disconnect the harness connector from the connector (P/J150) on the PWBA ASSY ANT.

Replacement

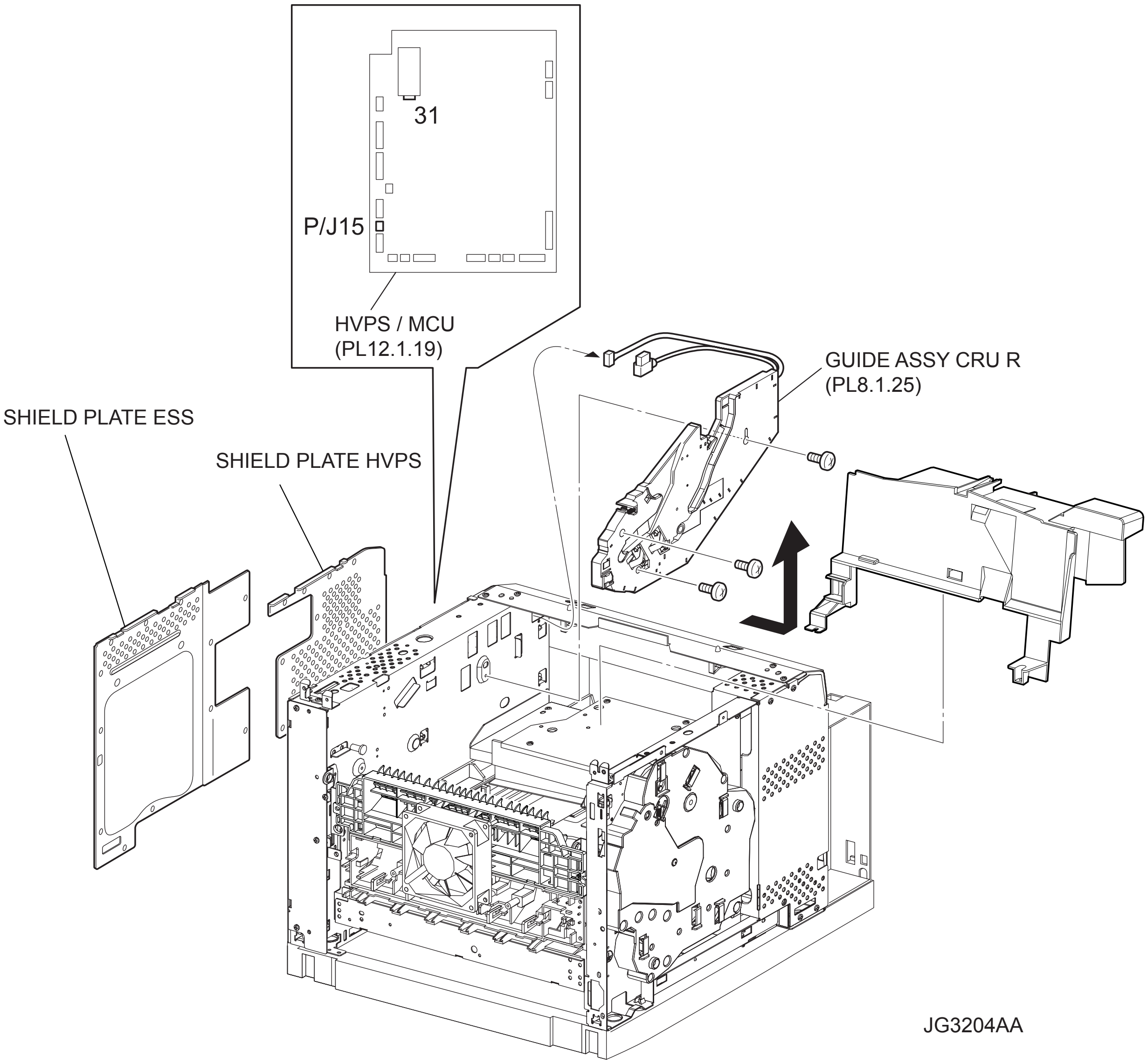
1) Connect the harness connector to the connector (P/J150) on the PWBA ASSY ANT.
2) Install the PWBA ASSY ANT to the GUIDE ASSY CRU R (PL8.1.25) using the 2 screws (gold tapping, 6mm).
3) Install the GUIDE ASSY CRU R (PL8.1.25). (RRP8.13)
4) Install the DUCT FRONT (PL8.1.4). (RRP8.2)
5) Install the COVER FRONT (PL1.1.5). (RRP1.5)
6) Install the COVER TOP (PL1.1.7). (RRP1.4)
7) Install the 500 EXIT ASST (PL10.1.2)/CHUTE LW EXT2 ASSY (PL9.1.2). (RRP10.2/9.1)
8) Install the COVER EXIT 500 (PL10.1.1)/CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP10.1/9.7)
9) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
10) Install the COVER LEFT (PL1.1.6). (RRP1.3)
11) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
12) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

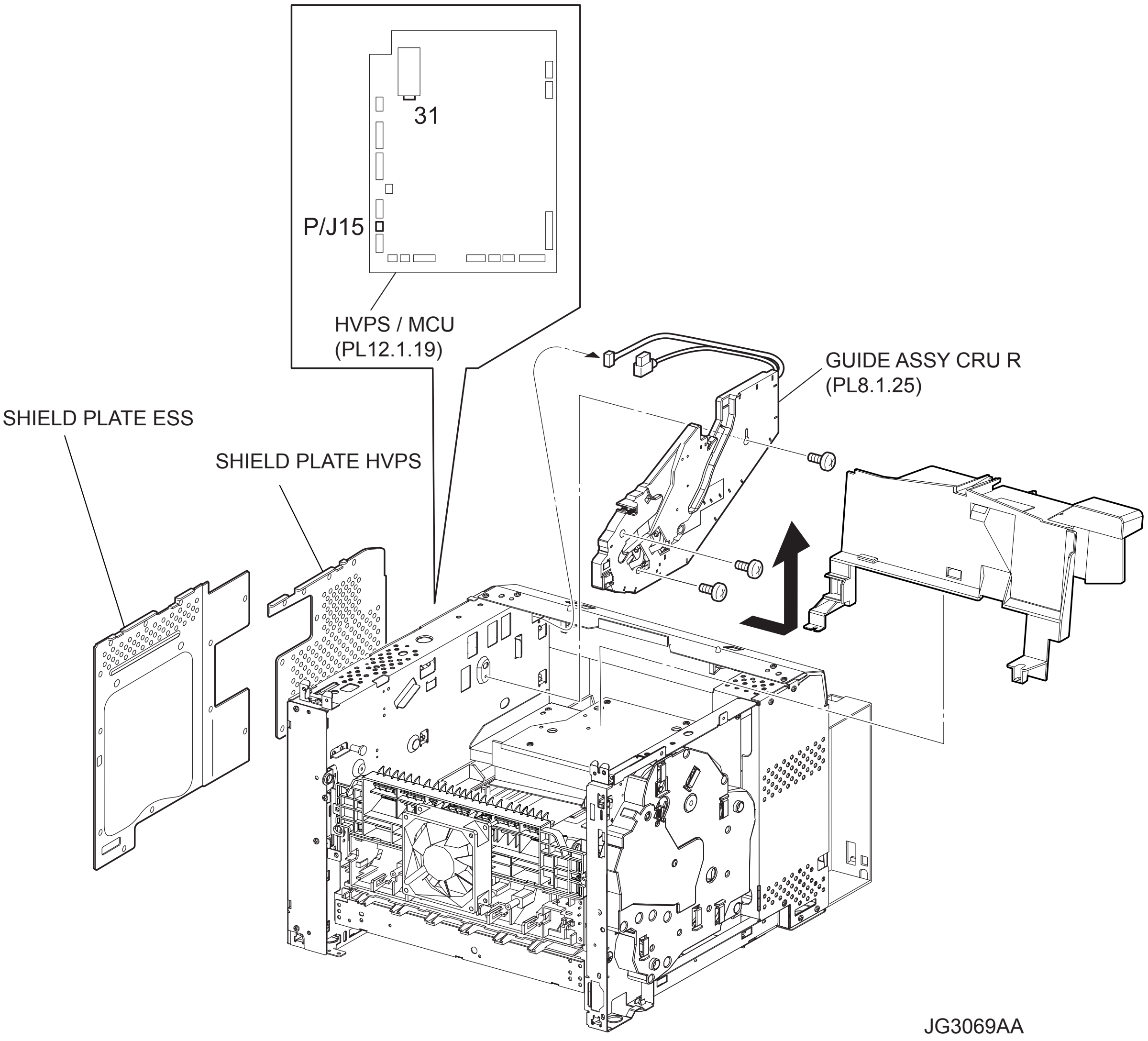
There are 2 kinds of screws, make sure they are put in the right place.

13) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
14) Install the BTR ASSY (PL8.1.21). (RRP8.10)

RRP8.13 GUIDE ASSY CRU R (PL8.1.25)


31
P/J15
HVPS / MCU
(PL12.1.19)
GUIDE ASSY CRU R
(PL8.1.25)
SHIELD PLATE ESS
SHIELD PLATE HVPS
JG3204AA

(34PPM)


31
P/J15
HVPS / MCU
(PL12.1.19)
GUIDE ASSY CRU R
(PL8.1.25)
SHIELD PLATE ESS
SHIELD PLATE HVPS
JG3069AA

(24PPM)

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
5) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
6) Remove the COVER EXIT 500 (PL10.1.1)/CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP10.1/9.7)
7) Remove the 500 EXIT ASST (PL10.1.2)/CHUTE LW EXT2 ASSY (PL9.1.2). (RRP10.2/9.1)
8) Remove the COVER TOP (PL1.1.7). (RRP1.4)
9) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
10) Remove the BTR ASSY (PL8.1.21). (RRP8.10)
11) Remove the SHIELD ASSY ESS (PL12.1.14). (RRP12.7)
12) Remove the SHIELD PLATE HVPS (PL12.1.18). (RRP12.9)
13) Remove the DUCT FRONT (PL8.1.4). (RRP8.2)
14) Disconnect the connector (P/J31) of the GUIDE ASSY CRU R from the HVPS/MCU (PL12.1.19).
15) Disconnect the connector (P/J15) of the HARNESS ASSY ANT from the HVPS/MCU.
16) Remove the 3 screws (silver, 6mm) securing the GUIDE ASSY CRU R to the frame.
17) Pull out the harness of the GUIDE ASSY CRU R from the frame.
18) Remove the GUIDE ASSY CRU R.

Replacement

1) Install the GUIDE ASSY CRU R.
2) Put the harness of the GUIDE ASSY CRU R to the hole of the frame.
3) Install the GUIDE ASSY CRU R to the frame using the 3 screws (silver, 6mm).
4) Connect the connector (P/J15) of the HARNESS ASSY ANT to the HVPS/MCU (PL12.1.19).
5) Connect the connector (P/J31) of the GUIDE ASSY CRU R to the HVPS/MCU.
6) Install the DUCT FRONT (PL8.1.4). (RRP8.2)
7) Install the SHIELD PLATE HVPS (PL12.1.18). (RRP12.9)
8) Install the SHIELD ASSY ESS (PL12.1.14). (RRP12.7)
9) Install the COVER FRONT (PL1.1.5). (RRP1.5)
10) Install the COVER TOP (PL1.1.7). (RRP1.4)
11) Install the 500 EXIT ASST (PL10.1.2)/CHUTE LW EXT2 ASSY (PL9.1.2). (RRP10.2/9.1)
12) Install the COVER EXIT 500 (PL10.1.1)/CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP10.1/9.7)
13) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
14) Install the COVER LEFT (PL1.1.6). (RRP1.3)
15) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
16) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

17) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
18) Install the BTR ASSY (PL8.1.21). (RRP8.10)

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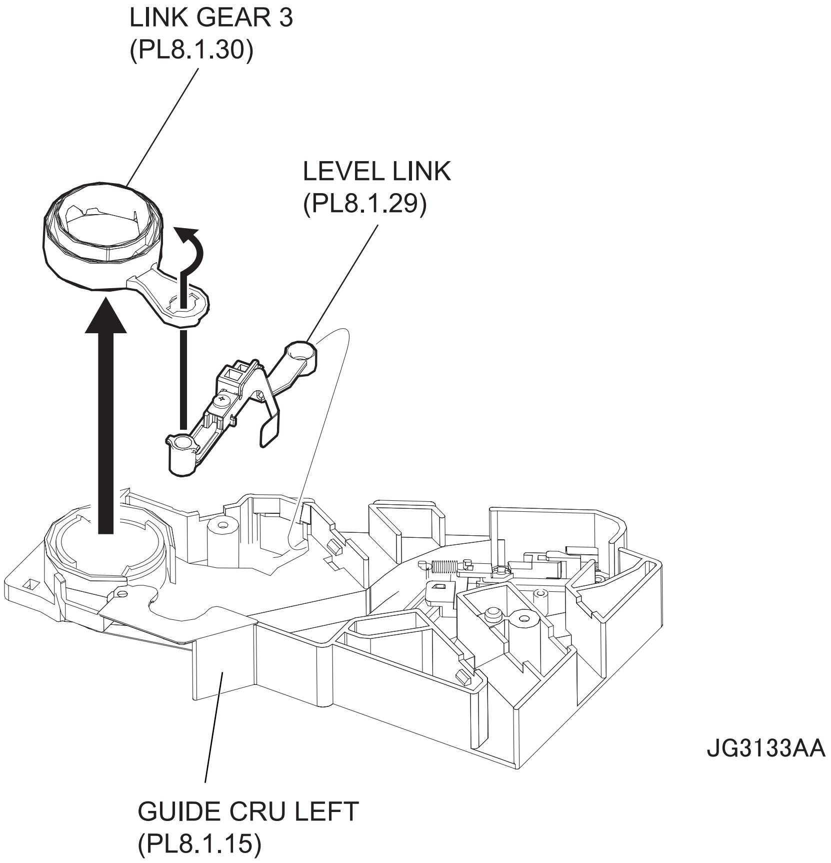
RRP8.14 LEVER LINK (PL8.1.29), LINK GEAR 3(PL8.1.30)


LINK GEAR 3
(PL8.1.30)
LEVEL LINK
(PL8.1.29)
JG3133AA
GUIDE CRU LEFT
(PL8.1.15)

34PPM

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
5) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
6) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
7) Remove the 500 EXIT ASSY (PL10.1.2). (RRP10.2)
8) Remove the COVER TOP (PL1.1.7). (RRP1.4)
9) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
10) Remove the BTR ASSY (PL8.1.21). (RRP8.10)
11) Remove the DUCT FRONT (PL8.1.4). (RRP8.2)
12) Remove the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

13) Remove the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
14) Remove the GUIDE TRAY LEFT (PL7.1.7). (RRP7.8)
15) Remove the MOTOR COVER (PL11.1.1). (RRP11.1)
16) Remove the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
17) Remove the GUIDE CRU LEFT (PL8.1.15). (RRP8.4)
18) Remove the COVER GUIDE CRU (PL8.1.16) and HARNESS ASSY FUSER (PL8.1.17) from the GUIDE CRU LEFT. (RRP8.7)
19) Remove the LEVER LINK and LINK GEAR 3.

Replacement

1) Assemble the LEVER LINK and LINK GEAR 3 as shown in the figure, and install them to the GUIDE CRU LEFT (PL8.1.15).
2) Install the COVER GUIDE CRU (PL8.1.16) and HARNESS ASSY FUSER (PL8.1.17) to the GUIDE CRU LEFT. (RRP8.7)
3) Install the GUIDE CRU LEFT. (RRP8.4)

NOTE **When installing, make sure that the LEVER LINK (PL8.1.29) is attached to the GUIDE CRU LEFT.**

NOTE **After installing the GUIDE CRU LEFT, touch the LINK GEAR 3 with your finger. Make sure that your finger can feel the LINK GEAR 3 move inward, when the LEVER LINK is pulled up.**

4) Install the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
5) Install the MOTOR COVER (PL11.1.1). (RRP11.1)
6) Install the GUIDE TRAY LEFT (PL7.1.7). (RRP7.8)
7) Install the he SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
8) Install the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

9) Install the DUCT FRONT (PL8.1.4). (RRP8.2)
10) Install the COVER FRONT (PL1.1.5). (RRP1.5)

11) Install the COVER TOP (PL1.1.7). (RRP1.4)
12) Install the 500 EXIT ASST (PL10.1.2). (RRP10.2)
13) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
14) Installl the COVER RIGHT (PL1.1.4). (RRP1.2)
15) Install the COVER LEFT (PL1.1.6). (RRP1.3)
16) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
17) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

There are 2 kinds of screws, make sure they are put in the right place.

18) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)
19) Install the BTR ASSY (PL8.1.21). (RRP8.10)

24PPM

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
5) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
6) Remove the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.1)
7) Remove the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
8) Remove the COVER TOP (PL1.1.7). (RRP1.4)
9) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
10) Remove the BTR ASSY (PL8.1.21). (RRP8.10)
11) Remove the GUIDE TRAY LEFT (PL6.1.7 or PL7.1.7). (RRP6.8 or RRP7.8)
12) Remove the DUCT FRONT (PL8.1.4). (RRP8.2)
13) Remove the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

14) Remove the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
15) Remove the MOTOR COVER (PL11.1.1). (RRP11.1)
16) Remove the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
17) Remove the GUIDE CRU LEFT (PL8.1.15). (RRP8.4)
18) Remove the COVER GUIDE CRU (PL8.1.16) and HARNESS ASSY FUSER (PL8.1.17) from the GUIDE CRU LEFT. (RRP8.7)
19) Remove the LEVER LINK and LINK GEAR 3.

Replacement

1) Assemble the LEVER LINK and LINK GEAR 3 as shown in the figure, and install them to the GUIDE CRU LEFT.
2) Install the COVER GUIDE CRU (PL8.1.16) and HARNESS ASSY FUSER (PL8.1.17) to the GUIDE CRU LEFT. (RRP8.7)
3) Install the GUIDE CRU LEFT. (RRP8.4)

NOTE **When installing, make sure that the LEVER LINK (PL8.1.29) is attached to the GUIDE CRU LEFT.**

NOTE **After installing the GUIDE CRU LEFT, touch the LINK GEAR 3 with your finger. Make sure that your finger can feel the LINK GEAR 3 move inward, when the LEVER LINK is pulled up.**

4) Install the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
5) Install the MOTOR COVER (PL11.1.1). (RRP11.1)
6) Install the he SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
7) Install the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

8) Install the DUCT FRONT (PL8.1.4). (RRP8.1)
9) Install the GUIDE TRAY LEFT (PL6.1.7 or PL7.1.7). (RRP6.8 or RRP7.8)
10) Install the COVER FRONT (PL1.1.5). (RRP1.5)

11) Install the COVER TOP (PL1.1.7). (RRP1.4)
12) Install the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
13) Install the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
14) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
15) Install the COVER LEFT (PL1.1.6). (RRP1.3)
16) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
17) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

There are 2 kinds of screws, make sure they are put in the right place.

18) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)
19) Install the BTR ASSY (PL8.1.21). (RRP8.10)

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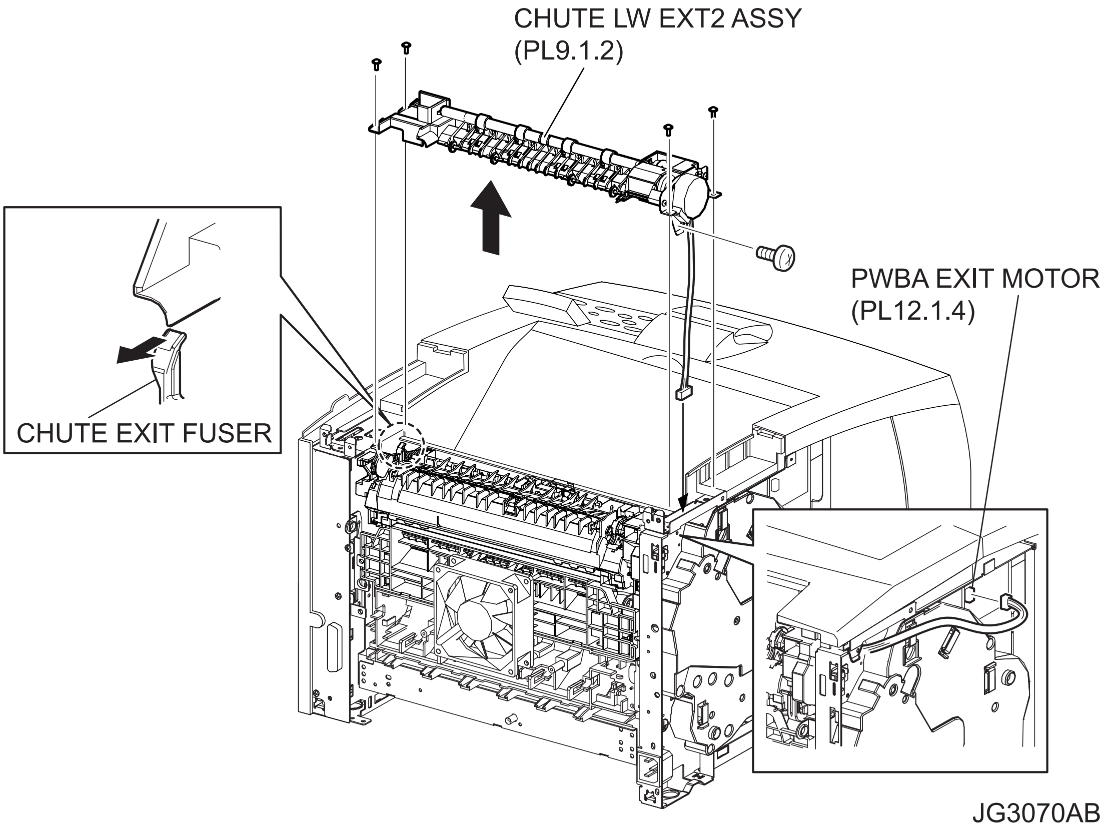
RRP9. 250 Paper Exit (24PPM)

RRP9.1   CHUTE LW EXT2 ASSY (PL9.1.2)


CHUTE LW EXT2 ASSY
(PL9.1.2)
CHUTE EXIT FUSER
PWBA EXIT MOTOR
(PL12.1.4)
JG3070AB

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
5) Disconnect the connector (P/J103) of the MOTOR ASSY EXIT (PL9.1.11) from the PWBA EXIT MOTOR (PL12.1.4).
6) Remove the 5 screws (silver with flange, 8mm ,4 ,silver, 6mm, 1) securing the CHUTE LW EXT2 ASSY to the printer.
7) Remove the CHUTE LW EXT2 ASSY.

Replacement

1) Put the harness of the MOTOR ASSY EXIT (PL9.1.11) assembled into the CHUTE LW EXT2 ASSY into the square hole on the frame.
2) Install the CHUTE LW EXT2 ASSY to the printer.

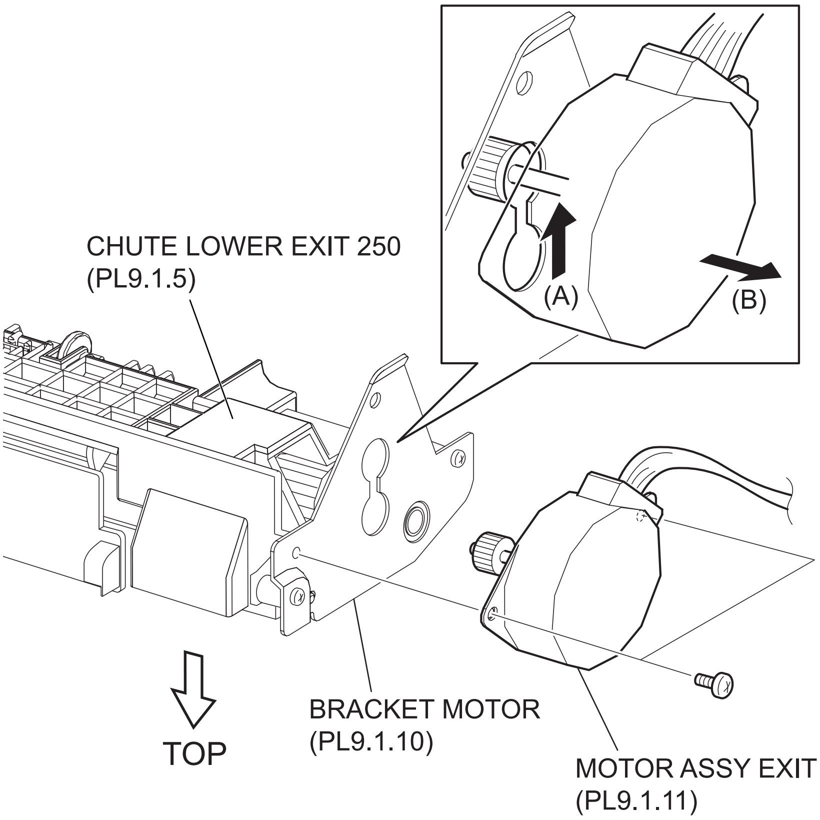
NOTE **When installing, pull the CHUTE EXIT FUSER lever.**

3) Install the CHUTE LW EXT2 ASSY to the printer using the 5 screws (silver with flange, 8mm, 4, silver, 6mm, 1).
4) Connect the connector (P/J103) of the MOTOR ASSY EXIT to the PWBA EXIT MOTOR (PL12.1.4).
5) Install the CHUTE ASSY EXIT 250 (Reference only) (PL9.1.14). (RRP9.7)
6) Install the COVER LEFT (PL1.1.6). (RRP1.3)
7) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

8) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)

RRP9.2   MOTOR ASSY EXIT (PL9.1.11)


(A)
(B)
CHUTE LOWER EXIT 250
(PL9.1.5)
TOP
BRACKET MOTOR
(PL9.1.10)
MOTOR ASSY EXIT
(PL9.1.11)

JG3072AA

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
5) Remove the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
6) Remove the 2 screws (silver, 6mm) securing the MOTOR ASSY EXIT to the BRACKET MOTOR (PL9.1.10) assembled into the CHUTE LOWER EXIT 250 (PL9.1.5).
7) Move the MOTOR ASSY EXIT in the direction of the arrows (A) and (B) to remove.

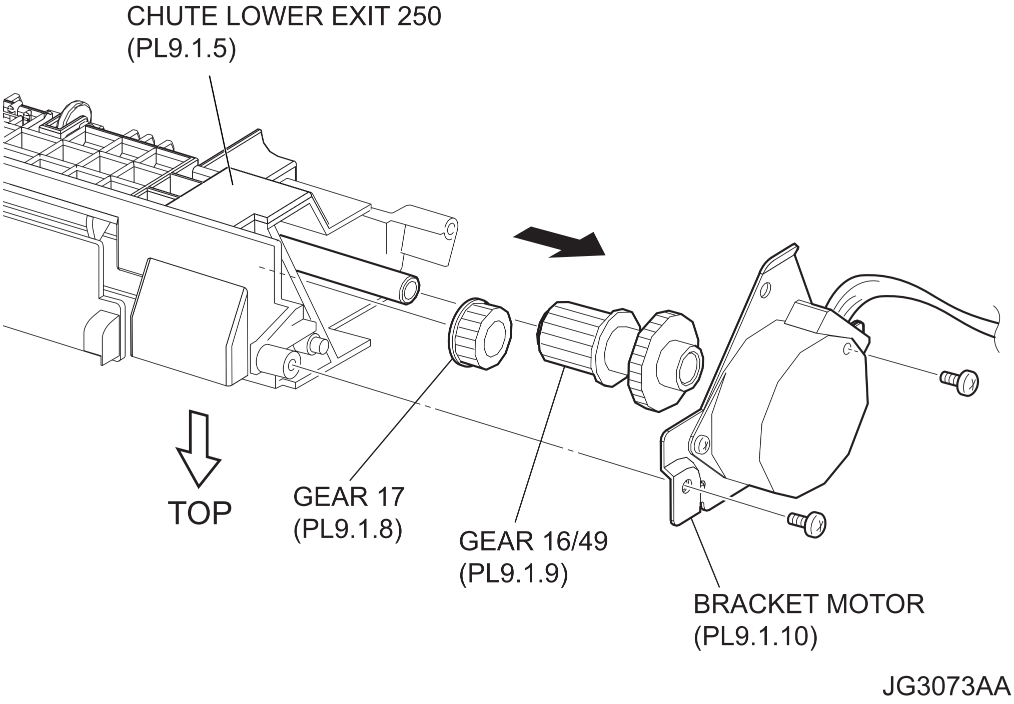
Replacement

1) Move the MOTOR ASSY EXIT in the opposite direction of the arrows (A) and (B) to install.
2) Secure the MOTOR ASSY EXIT to the BRACKET MOTOR (PL9.1.10) using the 2 screws (silver, 6mm).
3) Install the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
4) Install the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
5) Install the COVER LEFT (PL1.1.6). (RRP1.3)
6) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

7) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)

RRP9.3 GEAR 17 (PL9.1.8), GEAR 16/49 (PL9.1.9)


CHUTE LOWER EXIT 250
(PL9.1.5)
TOP
GEAR 17
(PL9.1.8)
GEAR 16/49
(PL9.1.9)
BRACKET MOTOR
(PL9.1.10)
JG3073AA

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
5) Remove the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
6) Remove the 2 screws (gold tapping, 8mm) securing the BRACKET MOTOR (PL9.1.10) to the CHUTE LOW EXIT 250 (PL9.1.5).
7) Remove the BRACKET MOTOR together with the MOTOR ASSY EXIT.
8) Remove the GEAR 17 and GEAR 16/49 from the CHUTE LOW EXIT 250.

Replacement

1) Install the GEAR 17 and GEAR 16/49.

NOTE

When installing, install the GEAR 17 in the direction shown in the figure.

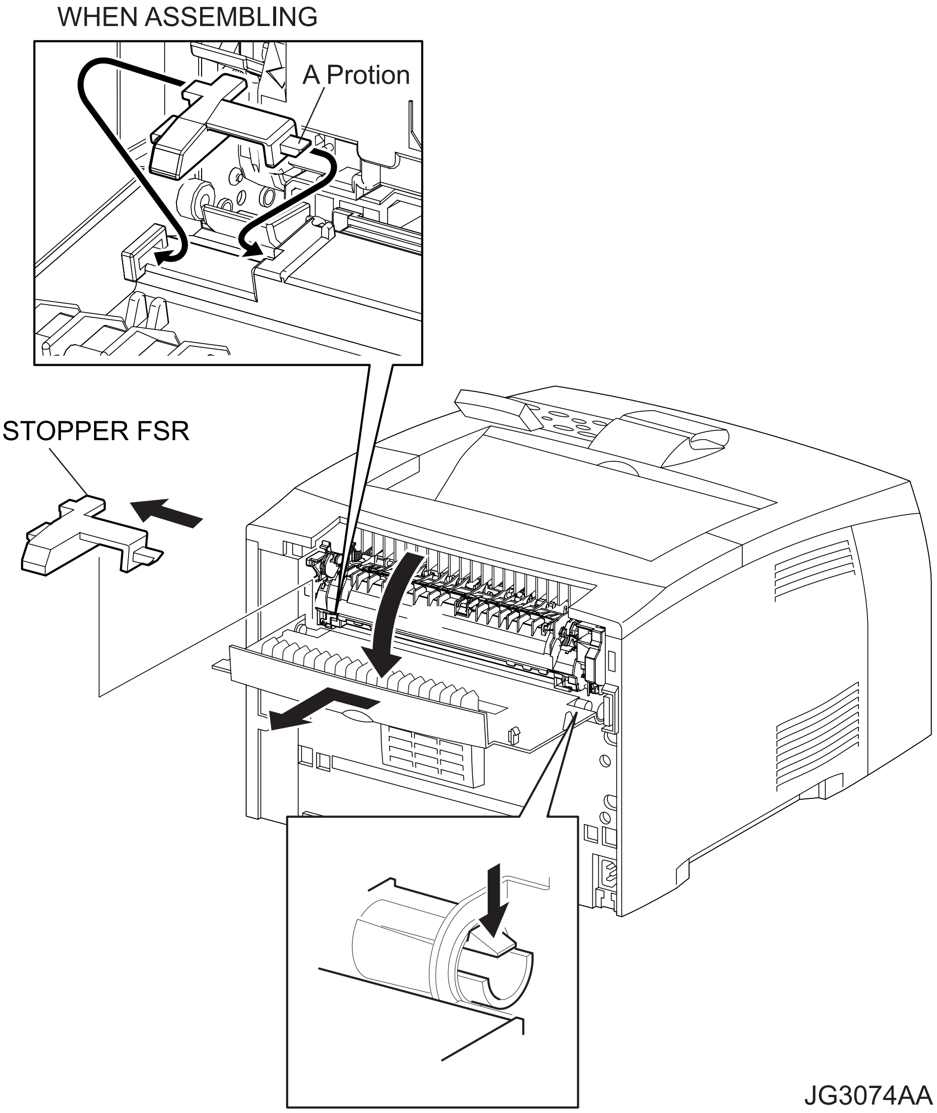
2) Install the BRACKET MOTOR (PL9.1.10) to the CHUTE LOW EXIT 250 (PL9.1.5) using the 2 screws (gold tapping, 8mm).
3) Install the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
4) Install the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
5) Install the COVER LEFT (PL1.1.6). (RRP1.3)
6) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

There are 2 kinds of screws, make sure they are put in the right place.

7) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)

RRP9.4   COVR REAR 250 (PL9.1.12)


WHEN ASSEMBLING
A Protion
STOPPER FSR
JG3074AA

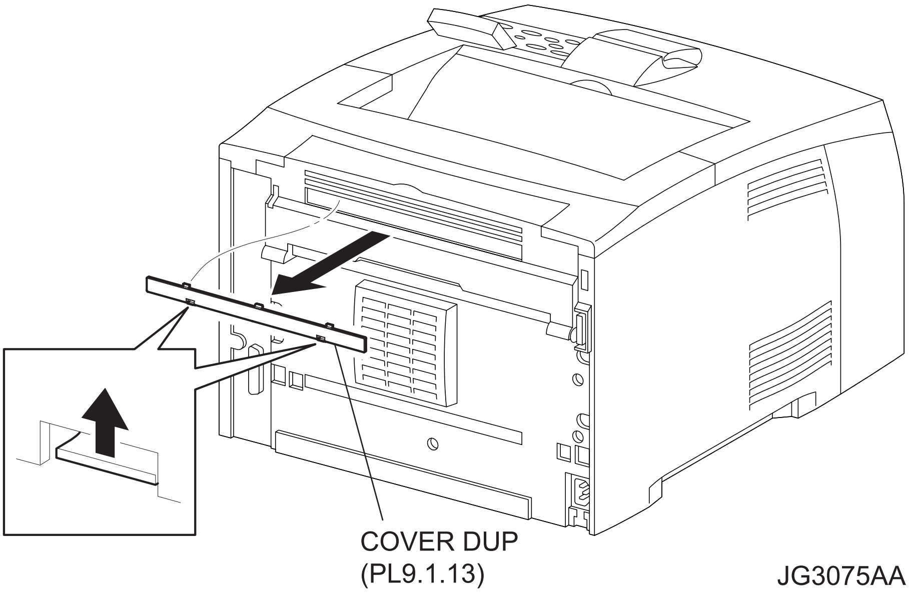
Removal

1) Open the COVER REAR 250.
2) Move the STOPPER FSR in the direction of the arrow to remove.
3) Release the hook of the boss on the COVER REAR 250, and shift the COVER REAR 250 in the direction of the arrow to remove from the printer.

Replacement

1) Shift the COVER REAR 250 in the opposite direction of the arrow to install, and secure it with the hook.
2) Insert the A portion of the STOPPER FSR into the COVER REAR 250 first, and insert the opposite side of the A portion .
3) Close the COVER REAR 250.

RRP9.5 COVER DUP (PL9.1.13)


COVER DUP
(PL9.1.13)
JG3075AA

Removal

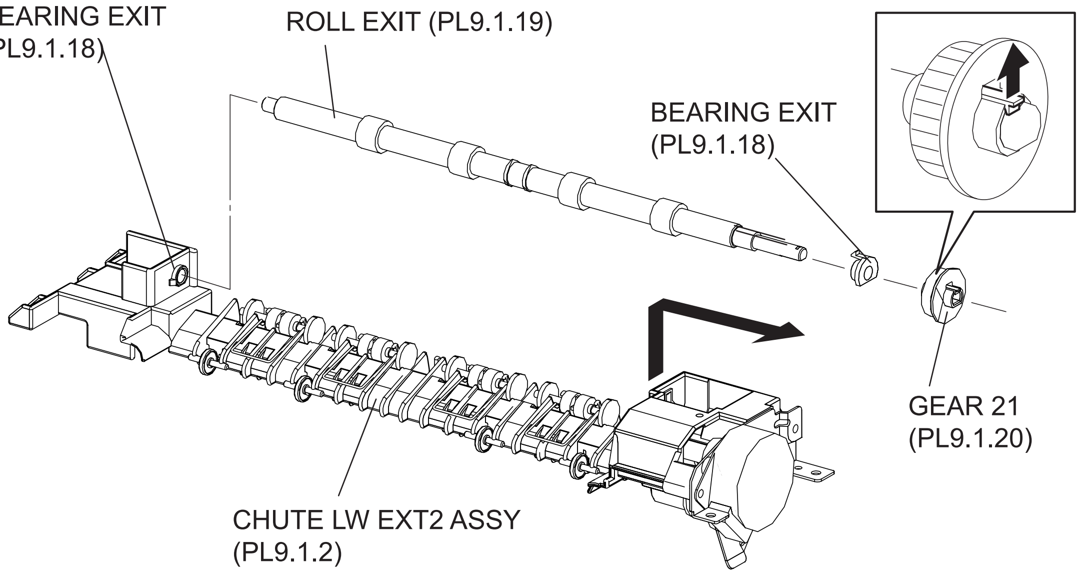
1) Release the hooks of the COVER DUP, and remove it from the COVER REAR 250.

NOTE **Be careful handling the hooks of the COVER DUP. They are fragile and could break if given excessive force.**

Replacement

1) Put 3 hooks of the upper portion of the COVER DUP into the COVER REAR 250, and then push it inward to install.

RRP9.6 ROLL EXIT (PL9.1.19)


BEARING EXIT
(PL9.1.18)
ROLL EXIT (PL9.1.19)
BEARING EXIT
(PL9.1.18)
GEAR 21
(PL9.1.20)
CHUTE LW EXT2 ASSY
(PL9.1.2)

JG3181AA

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
5) Remove the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
6) Release the hook of the GEAR 21 (PL9.1.20), and remove it from the ROLL EXIT.
7) Release the hook of the BEARING EXIT (PL9.1.18) on the GEAR 21 side, and lift up the ROLL EXIT, then, remove the BEARING EXIT from the ROLL EXIT.

NOTE

Be careful handling the hook of the BEARING EXIT. It is fragile and could break if given excessive force.

8) Remove the ROLL EXIT from the other side of the BEARING EXIT by shifting the ROLL EXIT in the direction of the arrow as shown in the figure.

NOTE

When removing, do not hold the rubber rollers of the ROLL EXIT.

Replacement

1) Install the ROLL EXIT to the BEARING EXIT (PL9.1.18) by shifting the ROLL EXIT in the opposite direction of the arrow.

NOTE

When installing, do not hold the rubber rollers of the ROLL EXIT.

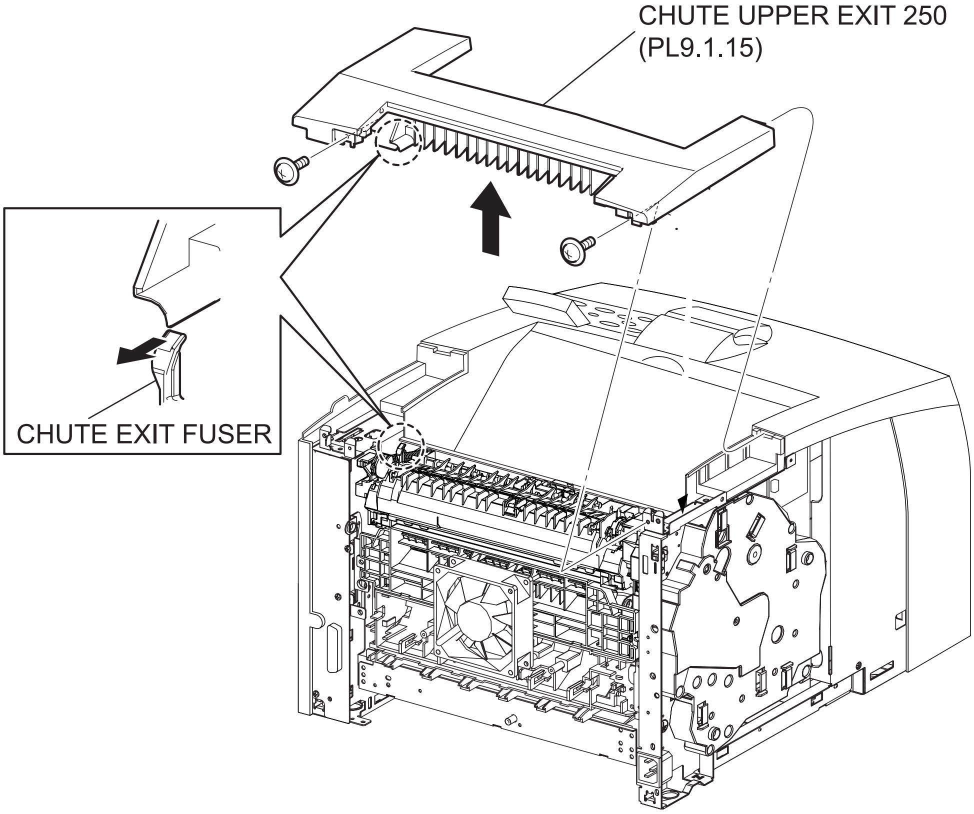
2) Put the BEARING EXIT to the ROLL EXIT on the GEAR 21 side, and install the BEARING EXIT to the CHUTE UPPER EXIT (PL9.1.15), then, secure it with the hook.
3) Install the GEAR 21 (PL9.1.20) to the ROLL EXIT, and secure it with the hook.
4) Install the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
5) Install the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
6) Install the COVER LEFT (PL1.1.6). (RRP1.3)
7) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

There are 2 kinds of screws, make sure they are put in the right place.

8) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)

RRP9.7 CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14)


CHUTE UPPER EXIT 250
(PL9.1.15)
CHUTE EXIT FUSER

JG3195AA

Removal

1) Open the COVER REAR 250 (PL9.1.12).
2) Remove the 2 screws (silver with flange, 8mm) securing the CHUTE ASSY EXIT 250 (Reference Only) to the printer.
3) Remove the CHUTE ASSY EXIT 250.

Replacement

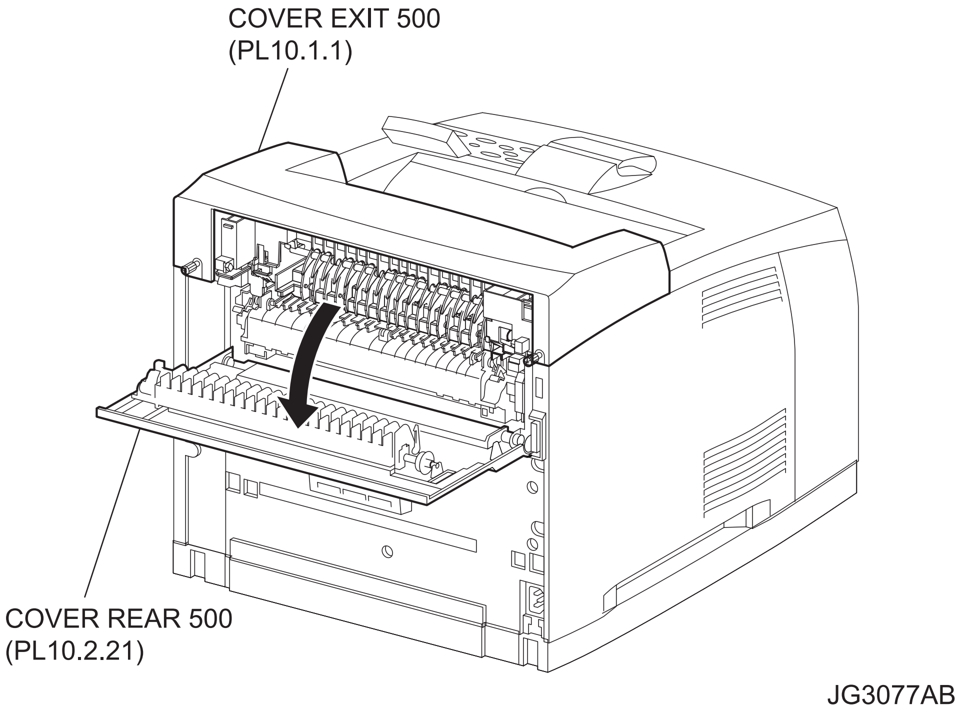
1) Put 2 hooks of the front side of the CHUTE ASSY EXIT 250 (Reference Only) into the holes of the printer.
2) Install the CHUTE ASSY EXIT 250 to the printer.

NOTE **When installing, pull the levert of the CHUTE EXIT FUSER .**

3) Secure the CHUTE ASSY EXIT 250 to the printer using the 2 screws (silver with falnge, 8mm).
4) Close the COVER REAR 250 (PL9.1.12).

RRP10. 500 Paper Exit

RRP10.1 COVER EXIT 500 (PL10.1.1)


COVER EXIT 500
(PL10.1.1)
COVER REAR 500
(PL10.2.21)
JG3077AB

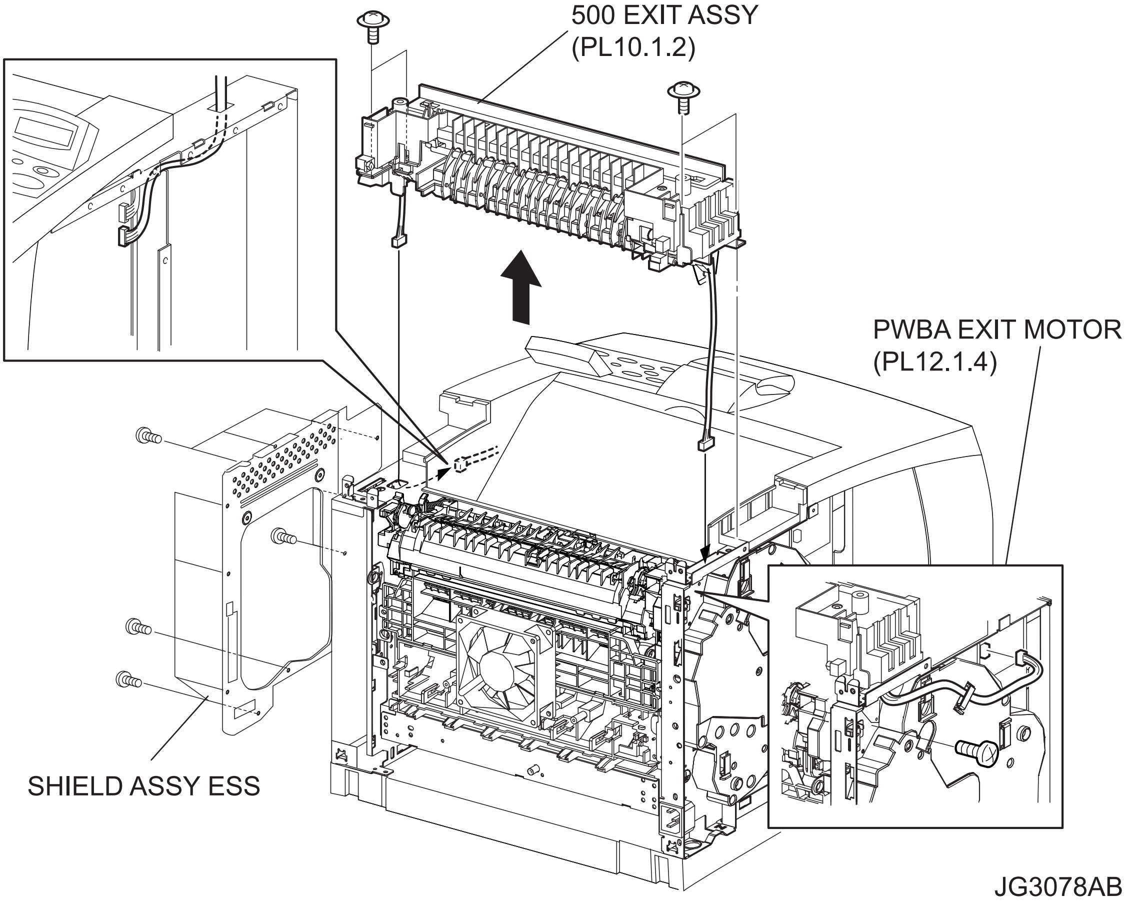
Removal

1) Open the COVER REAR 500 (PL10.2.21).
2) Remove the 2 screws securing the COVER EXIT 500, and remove the it from the printer.

Replacement

1) Install the COVER EXIT 500 to the printer, and secure it with 2 screws on both sides.
2) Close the COVER REAR 500 (PL10.2.21).

RRP10.2 500 EXIT ASSY (PL10.1.2)


500 EXIT ASSY
(PL10.1.2)
PWBA EXIT MOTOR
(PL12.1.4)
SHIELD ASSY ESS
JG3078AB

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
6) Remove the SHIELD ASSY ESS (PL12.1.14). (RRP12.7)
7) Disconnect the connector (P/J29) of the HARNESS ASSY EXIT SNR from the HVPS/MCU (PL12.1.19).
8) Disconnect the connector (P/J103) of the MOTOR ASSY EXIT from the PWBA EXIT MOTOR (PL12.1.4).
9) Remove the 5 screws（gold with spring washer,10mm,x4,silver 6mm,x1）securing the 500 EXIT ASSY to the printer.
10) Remove the 500 EXIT ASSY.

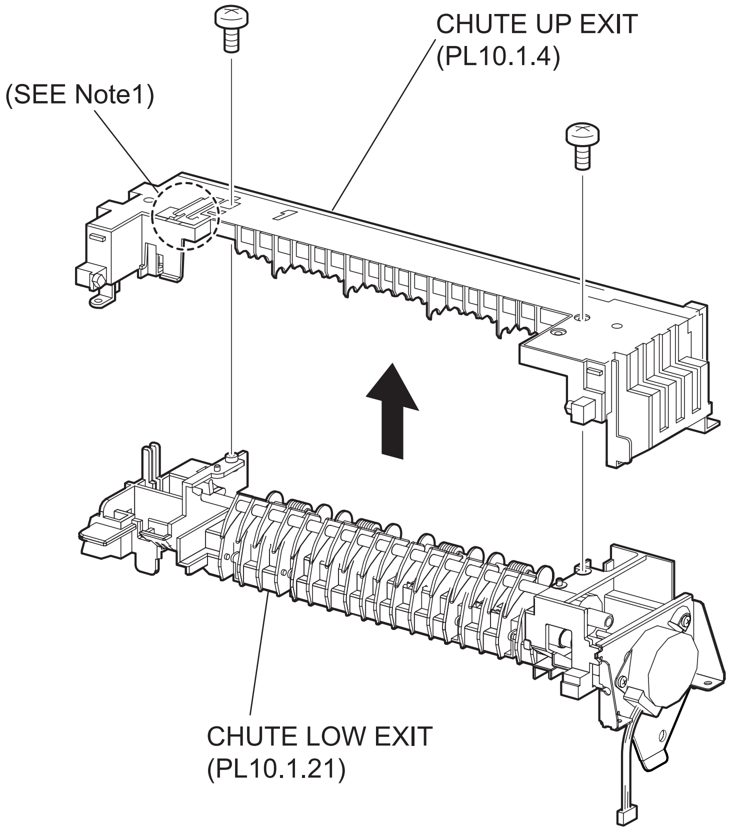
Replacement

1) Put the harnesses of the MOTOR ASSY EXIT and SENSOR into the hole on the frame.
2) Install the 500 EXIT ASSY using the 5 screws（gold with spring washer,10mm,x4,silver 6mm,x1）.
3) Connect the connector (P/J103) of the MOTOR ASSY EXIT to the PWBA EXIT MOTOR (PL12.1.4).
4) Connect the connector (P/J29) of the HARNESS ASSY EXIT SNR to the HVPS/MCU (PL12.1.19).
5) Install the SHIELD ASSY ESS (PL12.1.14). (RRP12.7)
6) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
7) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
8) Install the COVER LEFT (PL1.1.6). (RRP1.3)
9) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

10) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

RRP10.3 CHUTE UP EXIT (PL10.1.4), CHUTE LOW EXIT (PL10.1.21)


CHUTE UP EXIT
(PL10.1.4)
(SEE Note1)
CHUTE LOW EXIT
(PL10.1.21)

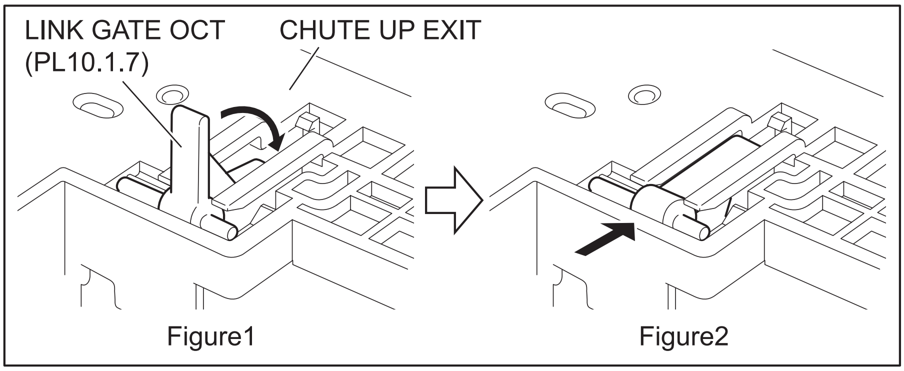
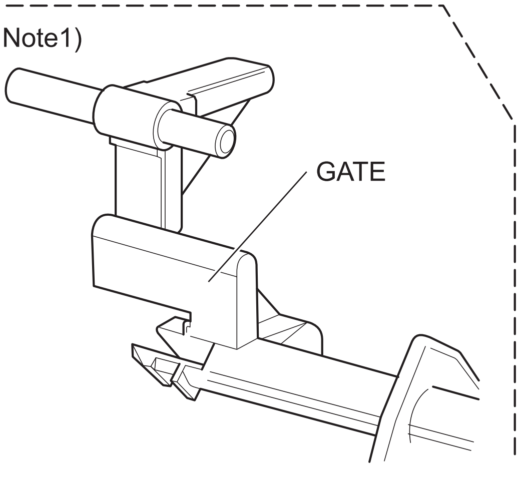
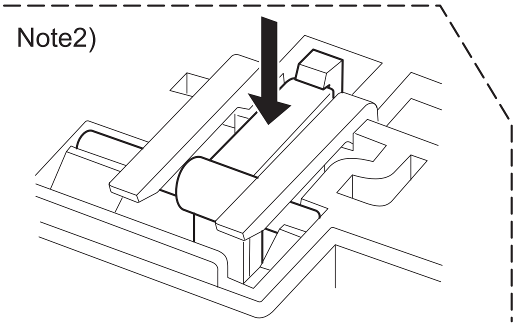

LINK GATE OCT
(PL10.1.7)
CHUTE UP EXIT

Figure1

Figure2





JG3079AB

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
6) Remove the 500 EXIT ASSY (PL10.1.2). (RRP10.2)
7) Remove the 2 screws (gold tapping, 8mm) securing the CHUTE UP EXIT to the CHUTE LOW EXIT.
8) Separate the CHUTE UP EXIT and CHUTE LOW EXIT.

Replacement

1) Remove the LINK GATE OCT (PL10.1.7) assembled into the removed CHUTE UP EXIT.
2) Secure the CHUTE UP EXIT to the CHUTE LOW EXIT using the 2 screws (gold tapping, 8mm).
3) Put the LINK GATE OCT under the 2 arms of the CHUTE UP EXIT as shown in figure 1, and turn it in the direction of the arrow.
4) Push the LINK GATE OCT in the direction of the arrow shown in the figure 2 as far as it will go.

NOTE **After installing, make sure that the LINK GATE OCT is placed at the back side of the GATE. (Note1)**

NOTE **After installing, make sure that the tip of the LINK GATE OCT is placed under the hook of the CHUTE LOW EXIT. (Note2)**

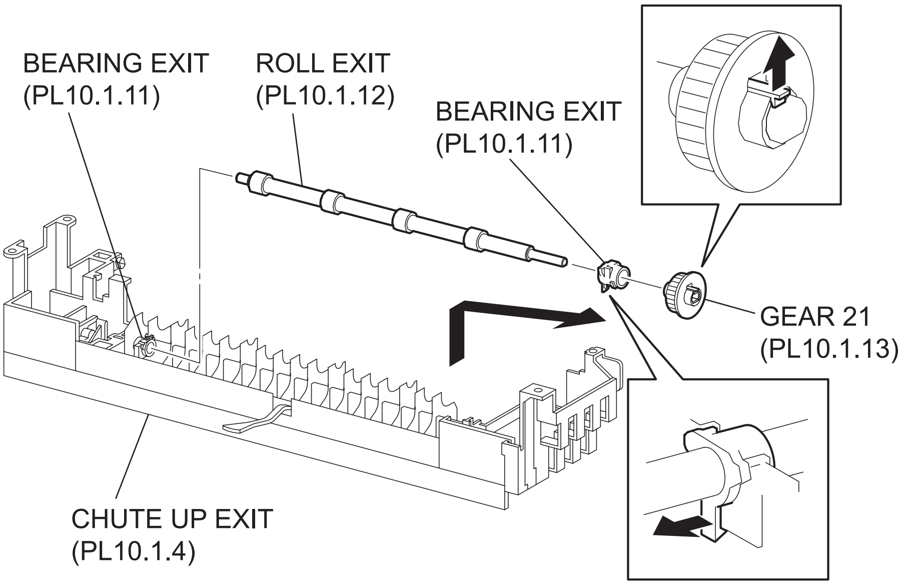
NOTE **After installing, make sure that the GATE moves when the LINK GATE OCT is pushed in the direction of the arrow. (Note2)**

5) Install the 500 EXIT ASSY (PL10.1.12). (RRP10.2)
6) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
7) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
8) Install the COVER LEFT (PL1.1.6). (RRP1.3)
9) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

10) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

RRP10.4 ROLL EXIT (PL10.1.12)


BEARING EXIT
(PL10.1.11)
ROLL EXIT
(PL10.1.12)
BEARING EXIT
(PL10.1.11)
GEAR 21
(PL10.1.13)
CHUTE UP EXIT
(PL10.1.4)

JG3080AA

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
6) Remove the CHUTE UP EXIT (PL10.1.4). (RRP10.3)
7) Release the hook of the GEAR 21 (PL10.1.13), and remove it from the ROLL EXIT.
8) Release the hook of the BEARING EXIT (PL10.1.11) on the GEAR 21 side, and lift up the ROLL EXIT, then, remove the BEARING EXIT from the ROLL EXIT.

NOTE **Be careful handling the hook of the BEARING EXIT. It is fragile and could break if given excessive force.**

9) Remove the ROLL EXIT from the other side of the BEARING EXIT by shifting the ROLL EXIT in the direction of the arrow as shown in the figure.

NOTE **When removing, do not hold the rubber rollers of the ROLL EXIT.**

Replacement

1) Install the ROLL EXIT to the BEARING EXIT (PL10.1.11) by shifting the ROLL EXIT in the opposite direction of the arrow.

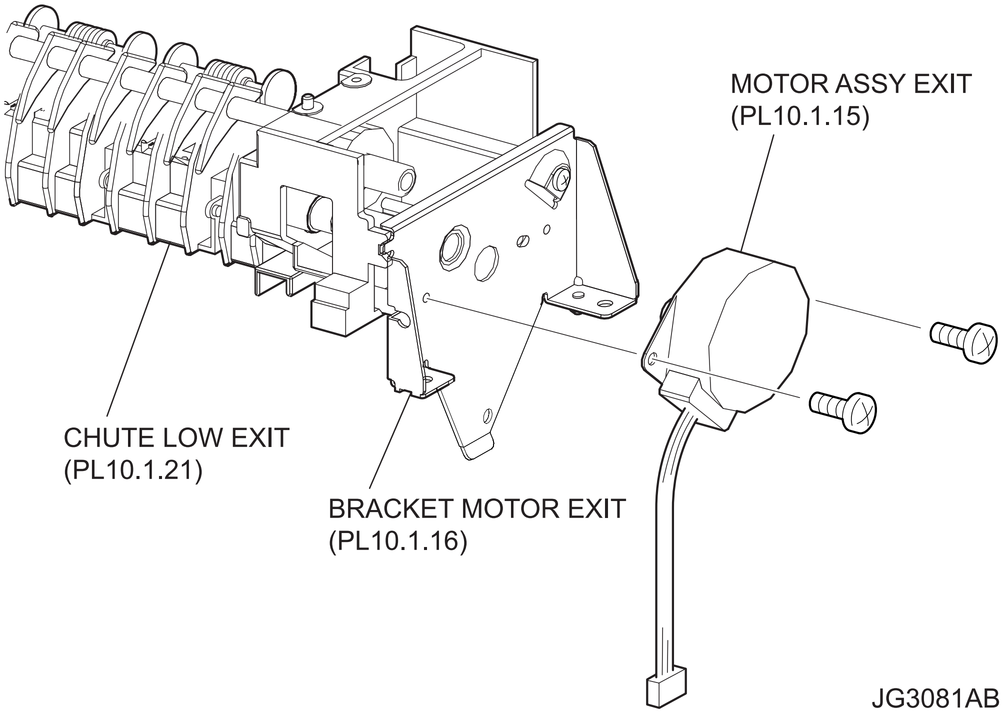
NOTE **When installing, do not hold the rubber rollers of the ROLL EXIT.**

2) Put the BEARING EXIT to the ROLL EXIT on the GEAR 21 side, and install the BEARING EXIT to the CHUTE UP EXIT (PL10.1.4), and then secure it with the hook.
3) Install the GEAR 21 (PL10.1.13) to the ROLL EXIT, and secure it with the hook.
4) Install the CHUTE UP EXIT. (RRP10.3)
5) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
6) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
7) Install the COVER LEFT (PL1.1.6). (RRP1.3)
8) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

9) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

RRP10.5 MOTOR ASSY EXIT (PL10.1.15)


MOTOR ASSY EXIT
(PL10.1.15)
CHUTE LOW EXIT
(PL10.1.21)
BRACKET MOTOR EXIT
(PL10.1.16)
JG3081AB

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
6) Remove the 500 EXIT ASSY (PL10.1.2). (RRP10.2)
7) Remove the CHUTE LOW EXIT (PL10.1.21). (RRP10.3)
8) Remove the 2 screws (silver, 6mm) securing the MOTOR ASSY EXIT to the BRACKET MOTOR EXIT (PL10.1.16).
9) Remove the MOTOR ASSY EXIT.

Replacement

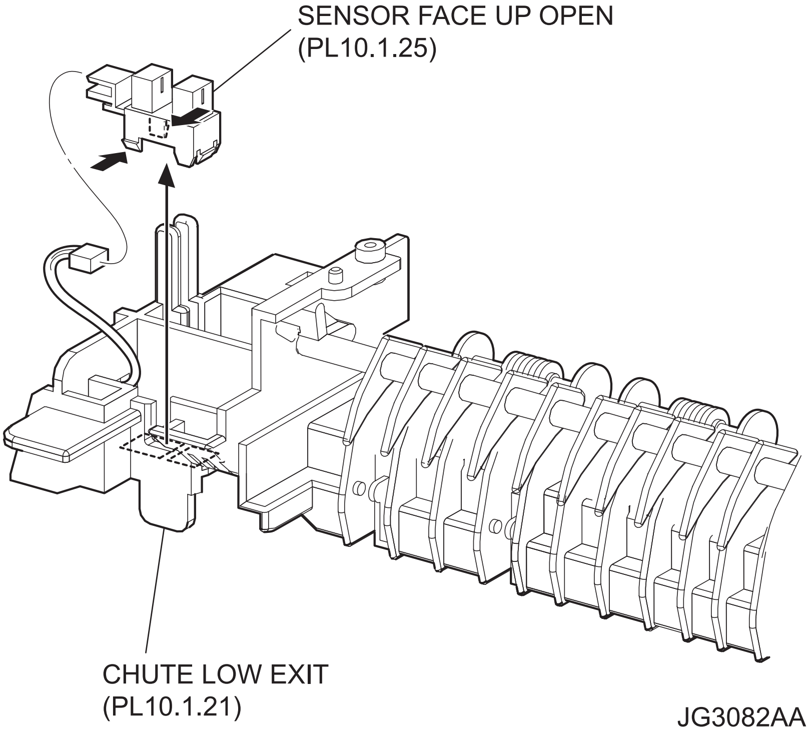
1) Secure the MOTOR ASSY EXIT to the BRACKET MOTOR EXIT (PL10.1.16) using the 2 screws (silver, 8mm).
2) Install the CHUTE LOW EXIT (PL10.1.21). (RRP10.3)
3) Install the 500 EXIT ASSY (PL10.1.2). (RRP10.2)
4) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
5) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
6) Install the COVER LEFT (PL1.1.6). (RRP1.3)
7) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

There are 2 kinds of screws, make sure they are put in the right place.

8) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

RRP10.6   SENSOR FACE UP OPEN (PL10.1.25)


SENSOR FACE UP OPEN
(PL10.1.25)
CHUTE LOW EXIT
(PL10.1.21)
JG3082AA

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
6) Remove the CHUTE UP EXIT (PL10.1.4). (RRP10.3)
7) Disconnect the connector (P/J291) of the HARNESS ASSY EXIT SNR (PL10.1.27) from the SENSOR FACE UP OPEN.
8) Lift up the CHUTE LOW EXIT (PL10.1.21), and release the hooks of the SENSOR FACE UP OPEN, then, remove the SENSOR FACE UP OPEN from the CHUTE LOW EXIT.

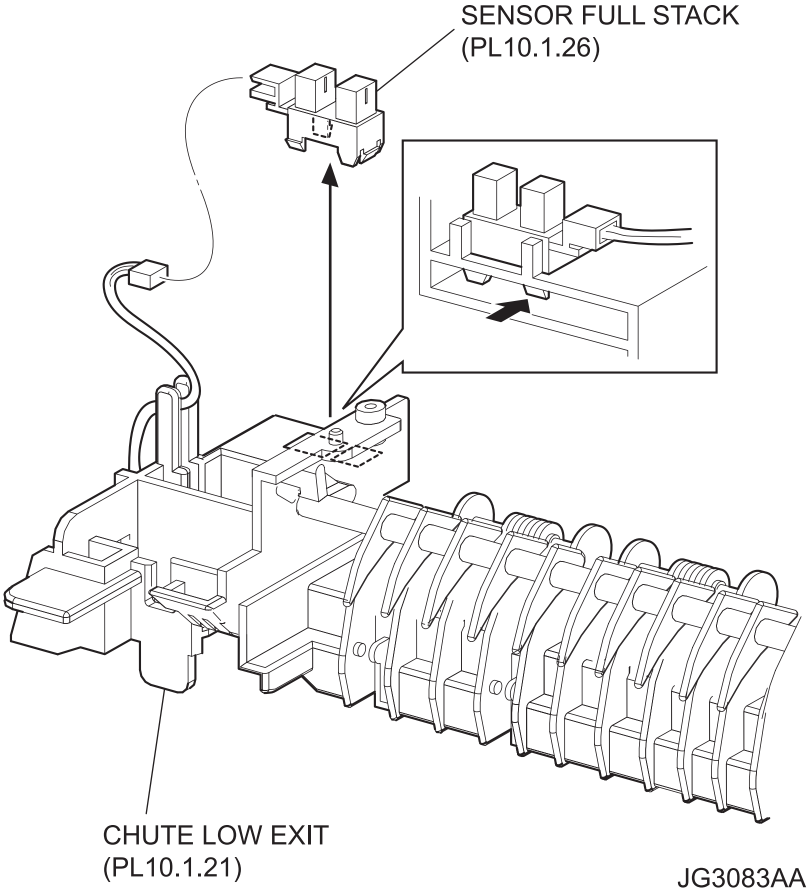
Replacement

1) Install the SENSOR FACE UP OPEN to the CHUTE LOW EXIT (PL10.1.21).
2) Connect the connector (P/J291) of the HARNESS ASSY EXIT SNR (PL10.1.27) to the SENSOR FACE UP OPEN.
3) Install the CHUTE UP EXIT (PL10.1.4). (RRP10.3)
4) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
5) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
6) Install the COVER LEFT (PL1.1.6). (RRP1.3)
7) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

8) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

RRP10.7 SENSOR FULL STACK (PL10.1.26)


SENSOR FULL STACK
(PL10.1.26)
CHUTE LOW EXIT
(PL10.1.21)
JG3083AA

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
6) Remove the CHUTE UP EXIT (PL10.1.4). (RRP10.3)
7) Disconnect the connector (P/J290) of the HARNESS ASSY EXIT SNR (PL10.1.27) from the SENSOR FULL STACK.
8) Release the hooks of the SENSOR FULL STACK, and remove the SENSOR FULL STACK from the CHUTE LOW EXIT (PL10.1.21).

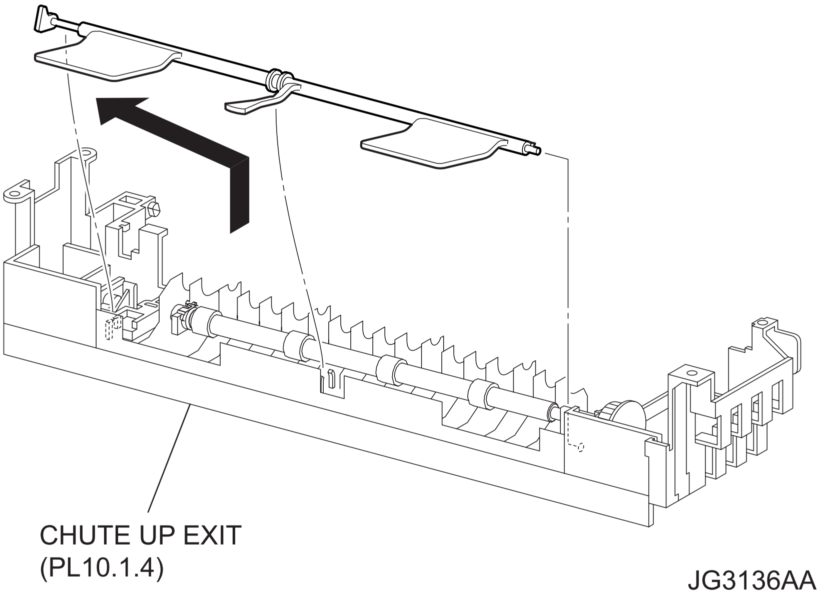
Replacement

1) Install the SENSOR FULL STACK to the CHUTE LOW EXIT (PL10.1.21).
2) Connect the connector (P/J290) of the HARNESS ASSY SNR (PL10.1.27) to the SENSOR FULL STACK.
3) Install the CHUTE UP EXIT (PL10.1.4). (RRP10.3)
4) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
5) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
6) Install the COVER LEFT (PL1.1.6). (RRP1.3)
7) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

8) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

RRP10.8 ACTUATOR FULL STACK (PL10.1.10)


CHUTE UP EXIT
(PL10.1.4)
JG3136AA

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
6) Remove the CHUTE UP EXIT (PL10.1.4). (RRP10.3)
7) Remove the ACTUATOR FULL STACK from the CHUTE UP EXIT by moving it in the direction of the arrow.

Replacement

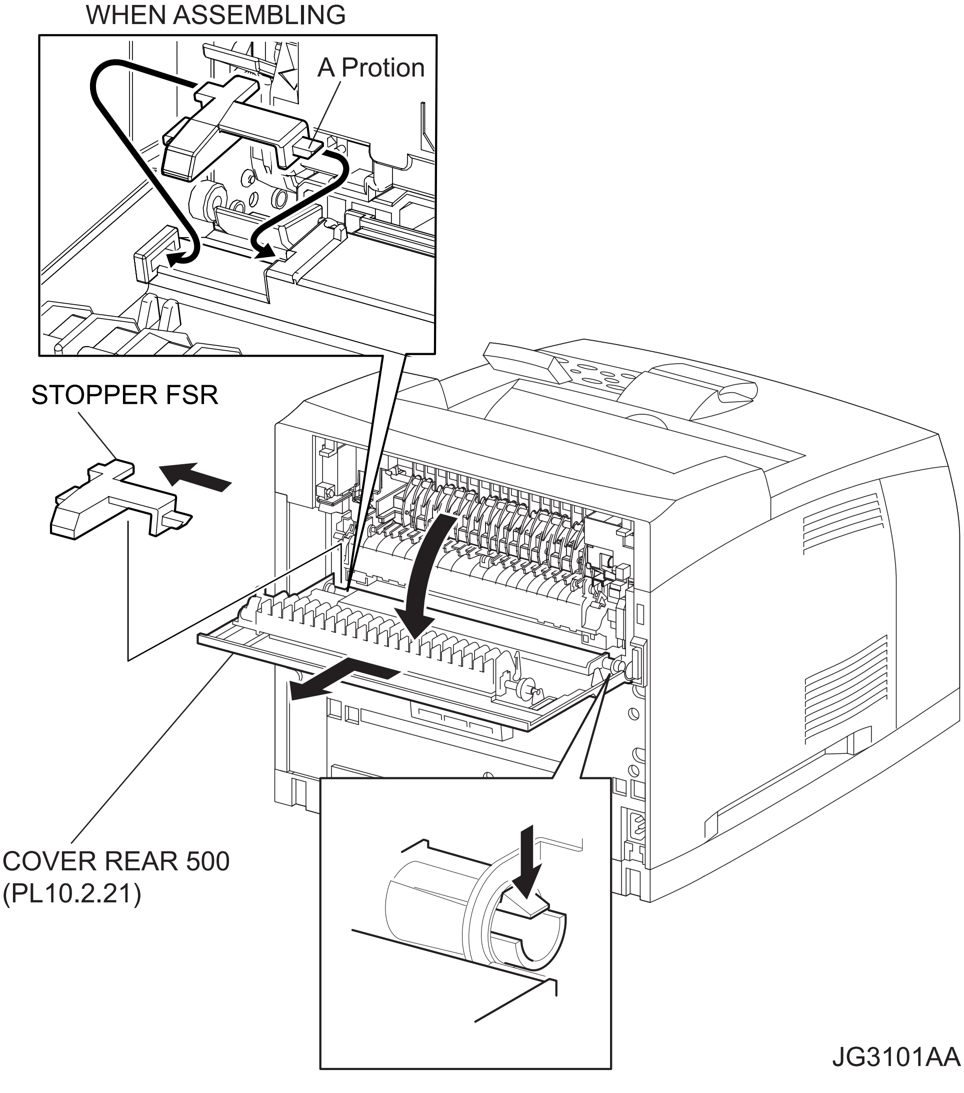
1) Install the ACTUATOR FULL STACK to the CHUTE UP EXIT (PL10.1.4) by moving it in the opposite direction of the arrow.
2) Install the CHUTE UP EXIT. (RRP10.3)
3) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
4) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Install the COVER LEFT (PL1.1.6). (RRP1.3)
6) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

There are 2 kinds of screws, make sure they are put in the right place.

7) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

RRP10.9 COVER REAR 500 (PL10.2.21)


WHEN ASSEMBLING
A Protion
STOPPER FSR
COVER REAR 500
(PL10.2.21)
JG3101AA

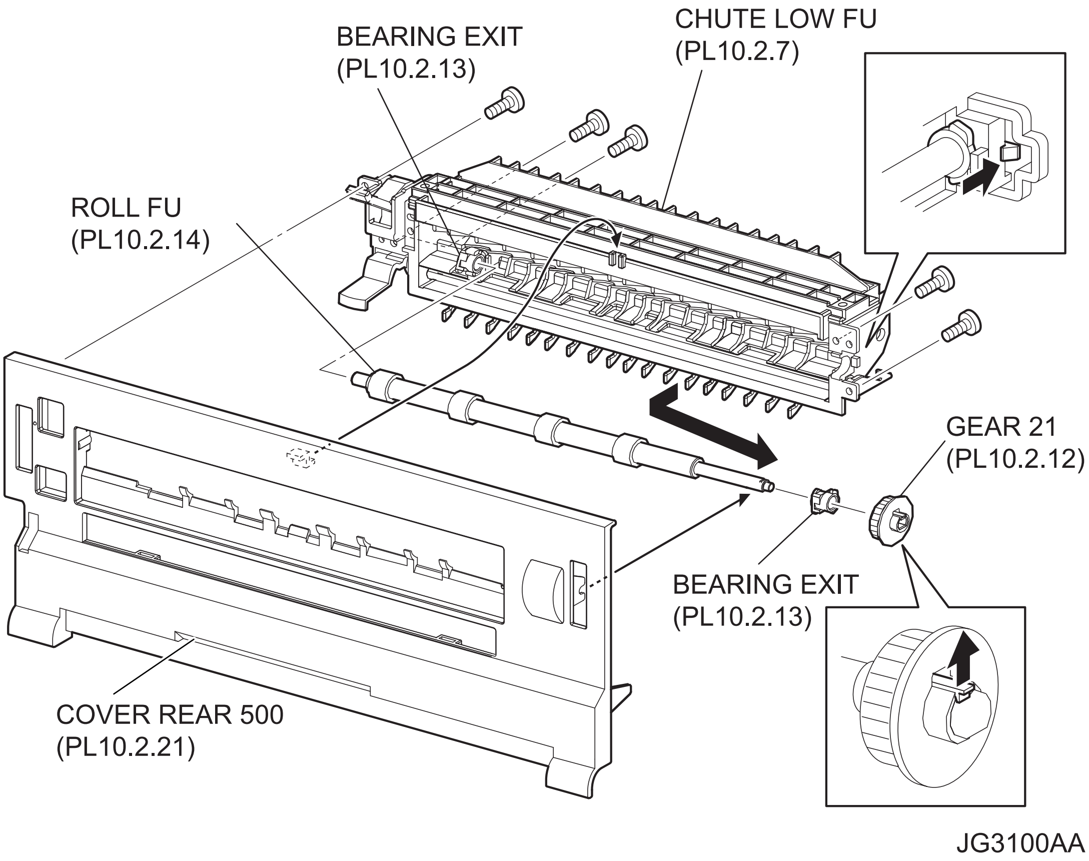
Removal

1) Pinch the lever to release the lock, and open the COVER REAR 500.
2) Move the STOPPER FSR in the arrow direction to remove.
3) Release the hook of the right side boss of the COVER REAR 500, and shift the COVER REAR 500 in the direction of the arrow to remove from the printer.

Replacement

1) Shift the COVER REAR 500 in the opposite direction of the arrow to install, and secure it with the hook.
2) Insert the A portion of the STOPPER FSR into the COVER REAR 500 first, and insert the opposite side of the A portion .
3) Close the COVER REAR 500.

RRP10.10 ROLL FU (PL10.2.14)


BEARING EXIT
(PL10.2.13)
CHUTE LOW FU
(PL10.2.7)
ROLL FU
(PL10.2.14)
GEAR 21
(PL10.2.12)
BEARING EXIT
(PL10.2.13)
COVER REAR 500
(PL10.2.21)
JG3100AA

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the 5 screws (gold tapping, 8mm) securing the CHUTE LOW FU (PL10.2.7) to the COVER REAR 500.
3) Release the hooks of the COVER REAR 550, and remove the CHUTE LOW FU from the COVER REAR 500.
4) Release the hook of the GAER 21 (PL10.2.12), and remove it from the ROLL FU.
5) Release the hook of the BEARING EXIT (PL10.2.13), and remove it from the CHUTE LOW FU.

NOTE

Be careful handling the hook of the BEARING EXIT. It is fragile and could break if given excessive force.

6) Remove the ROLL FU in the direction of the arrow.

Replacement

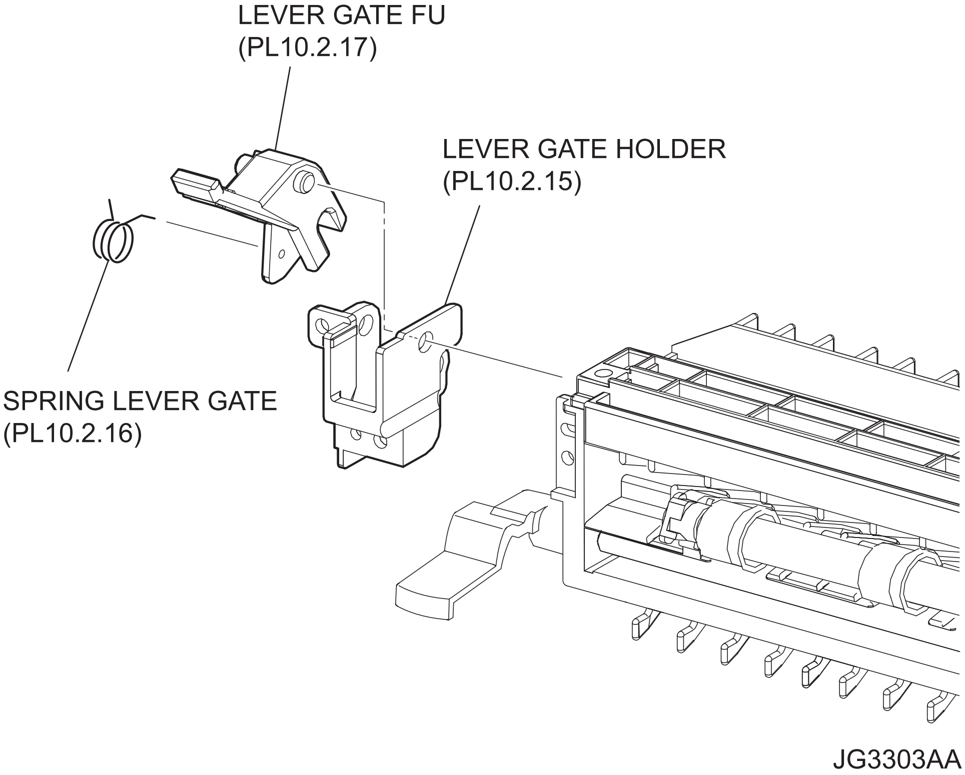
1) Install the ROLL FU to the BEARING EXIT (PL22.1.13) on the opposite side of the GEAR 21 (PL10.2.12) by shifting the ROLL FU in the opposite direction of the arrow.
2) Install the BEARING EXIT to the CHUTE LOW FU (PL10.2.7).
3) Install the GEAR 21 to the ROLL FU, and secure it with the hook.

NOTE

Be sure to install the hook of the GEAR 21 into the groove of the ROLL FU.

4) Install the CHUTE LOW FU to the COVER REAR 550, and secure it with the hook.
5) Secure the CHUTE LOW FU to the COVER REAR 550 using the 5 screws (gold tapping, 8mm).
6) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

RRP10.11 LEVER GATE HOLDER (PL10.2.15),SPRING LEVER GATE (PL10.2.16), LEVER GATE FU (PL10.2.17)


LEVER GATE FU
(PL10.2.17)
LEVER GATE HOLDER
(PL10.2.15)
SPRING LEVER GATE
(PL10.2.16)
JG3303AA

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the 5 screws (gold tapping, 6mm) securing the CHUTE LOW FU (PL10.2.7) to the COVER REAR 550.
3) Release the hooks of the COVER REAR 550, and remove the CHUTE LOW FU from the COVER REAR 550.
4) Remove the ROLL FU (PL10.2.14).(RRP10.10).
5) Remove the LEVER GATE FU (PL10.2.17) by rotating.

NOTE

LEVER GATE HOLDER (PL10.2.15), SPRING LEVER GATE (PL10.2.16), and LEVER GATE FU (PL10.2.17) are removed at the same time.

6) Bend LEVER GATE FU (PL10.2.17), and remove it from LEVER GATE HOLDER (PL10.2.15).

NOTE

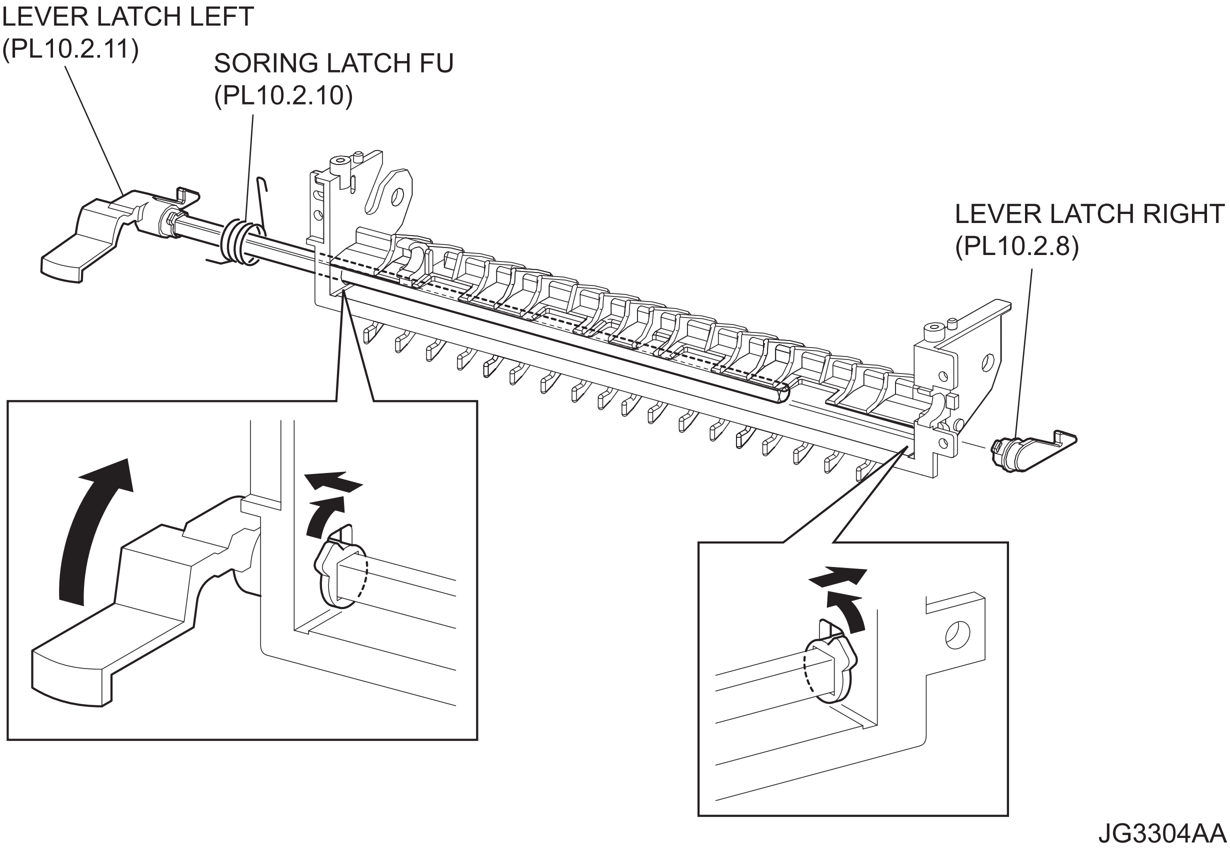
SPRING LEVER GATE (PL10.2.16) remains on the side of LEVER GATE HOLDER (PL10.2.15).

7) Remove the SPRING LEVER GATE (PL10.2.16).

Replacement

1) Install the ROLL FU to the BEARING EXIT (PL22.1.13) on the opposite side of the GEAR 21 (PL10.2.12) by shifting the ROLL FU in the opposite direction of the arrow.
2) Install the BEARING EXIT to the CHUTE LOW FU (PL10.2.7).
3) Install the GEAR 21 to the ROLL FU, and secure it with the hook.
4) Install the ROLL FU (PL10.2.14).(RRP10.10).
5) Install the CHUTE LOW FU to the COVER REAR 550, and secure it with the hook.
6) Secure the CHUTE LOW FU to the COVER REAR 550 using the 5 screws (gold tapping, 6mm).
7) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

RRP10.12 LEVER LATCH LEFT (PL10.2.8), SPRING LATCH FU (PL10.2.10), LEVER LATCH RIGHT (PL10.2.11)


LEVER LATCH LEFT
(PL10.2.11)
SORING LATCH FU
(PL10.2.10)
LEVER LATCH RIGHT
(PL10.2.8)
JG3304AA

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the 5 screws (gold tapping, 6mm) securing the CHUTE LOW FU (PL10.2.7) to the COVER REAR 550.
3) Release the hooks of the COVER REAR 550, and remove the CHUTE LOW FU from the COVER REAR 550.
4) Remove the ROLL FU (PL10.2.14). (RRP10.10)
5) Remove the LEVER GATE HOLDER (PL10.2.15), SPRING LEVER GATE (PL10.2.16), LEVER GATE FU (PL10.2.17).(RRP10.11)
6) Rotate LEVER LATCH LEFT (PL10.2.8) in the direction of the arrow, and remove it.

NOTE **Fit the position of the internal projection of LEVER LATCH LEFT (PL10.2.8) and the notch of CHUTE LOW FU (PL10.2.7) completely.**

7) Rotate LEVER LATCH RIGHT (PL10.2.11) in the direction of the arrow, and remove it.

NOTE **Fit the position of the internal projection of LEVER LATCH RIGHT (PL10.2.11) and the notch of CHUTE LOW FU (PL10.2.7) completely.**

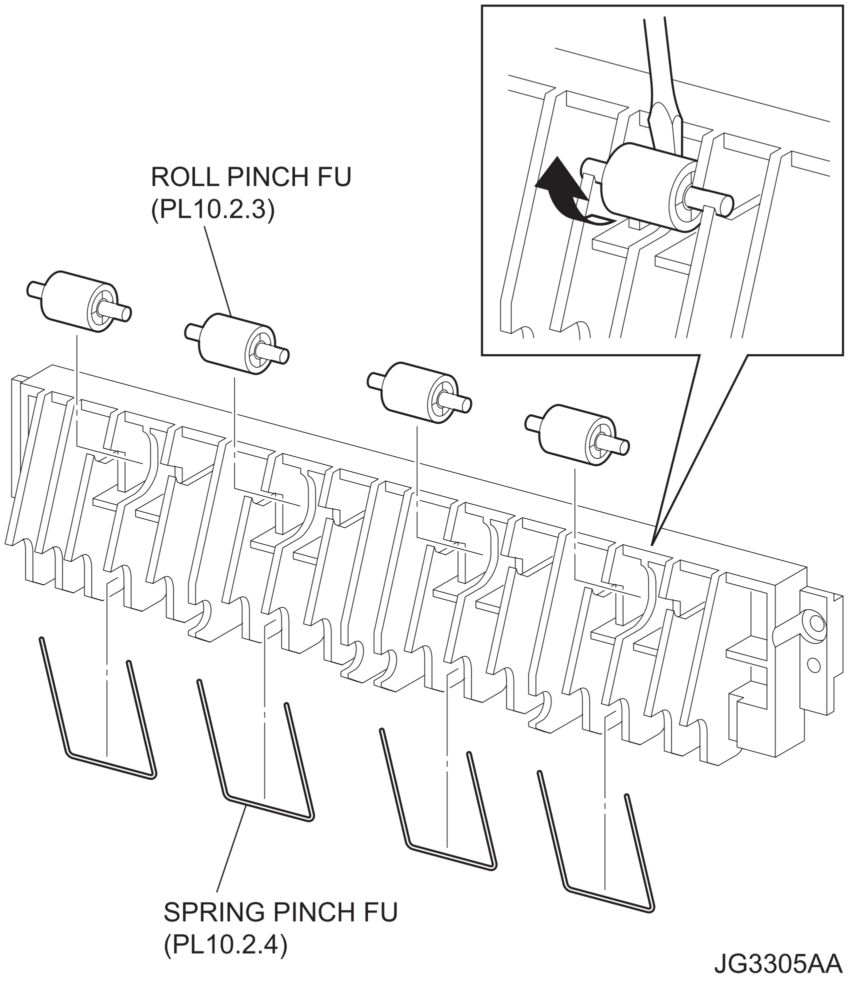
NOTE **PIPE LATCH FU (PL10.2.9) is also removed.**

8) Remove the SPRING LATCH (PL10.2.10).

Replacement

1) Install the SPRING LATCH (PL10.2.10).
2) Install the LEVER LATCH LEFT (PL10.2.8) to PIPE LATCH FU (PL10.2.9), then install them to CHUTE LOW FU (PL10.2.7).
3) Install the LEVER LATCH RIGHT (PL10.2.11) to PIPE LATCH FU (PL10.2.9).
4) Fit the projections of both LEVER LATCH RIGHT (PL10.2.11) and LEVER LATCH LEFT (PL10.2.8) to the notch of CHUTE LOW FU (PL10.2.7), and install by rotating in the opposite direction of the arrow.
5) Install LEVER GATE HOLDER (PL10.2.15), SPRING LEVER GATE (PL10.2.16), and LEVER GATE FU (PL10.2.17).
6) Install the ROLL FU (PL10.2.14).(RRP10.10).
7) Install the CHUTE LOW FU to the COVER REAR 550, and secure it with the hook.
8) Secure the CHUTE LOW FU to the COVER REAR 550 using the 5 screws (gold tapping, 6mm).
9) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

RRP10.13 ROLL PINCH FU (PL10.2.3), SPRING PINCH FU (PL10.2.4)


ROLL PINCH FU
(PL10.2.3)
SPRING PINCH FU
(PL10.2.4)
JG3305AA

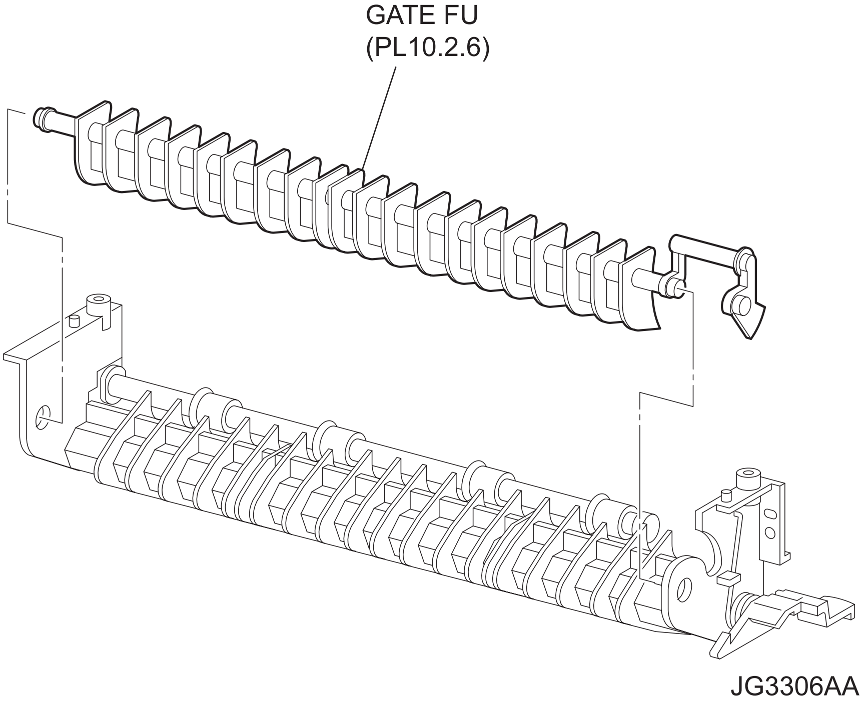
Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the 5 screws (gold tapping, 6mm) securing the CHUTE LOW FU (PL10.2.7) to the COVER REAR 550.
3) Release the hooks of the COVER REAR 550, and remove the CHUTE LOW FU from the COVER REAR 550.
4) Remove the 2 screws (gold tapping, 6mm) securing the CHUTE UP FU (PL10.2.2).
5) Insert a screwdriver between ROLL PINCH FU (PL10.2.3) and CHUTE UP FU (PL10.2.2), and remove ROLL PINCH FU (PL10.2.3).
6) Remove the SPRING PINCH FU (PL10.2.4).

Replacement

1) Install the SPRING PINCH FU (PL10.2.4).
2) Install the ROLL PINCH FU (PL10.2.3).
3) Install the CHUTE UP FU (PL10.2.2) to the CHUTE LOW FU(PL10.2.7) using the 4 screws (gold tapping, 6mm).
4) Install the CHUTE LOW FU to the COVER REAR 550, and secure it with the hook.
5) Secure the CHUTE LOW FU to the COVER REAR 550 using the 5 screws (gold tapping, 6mm).
6) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

RRP10.14 GATE FU (PL10.2.6)


GATE FU
(PL10.2.6)
JG3306AA

Removal

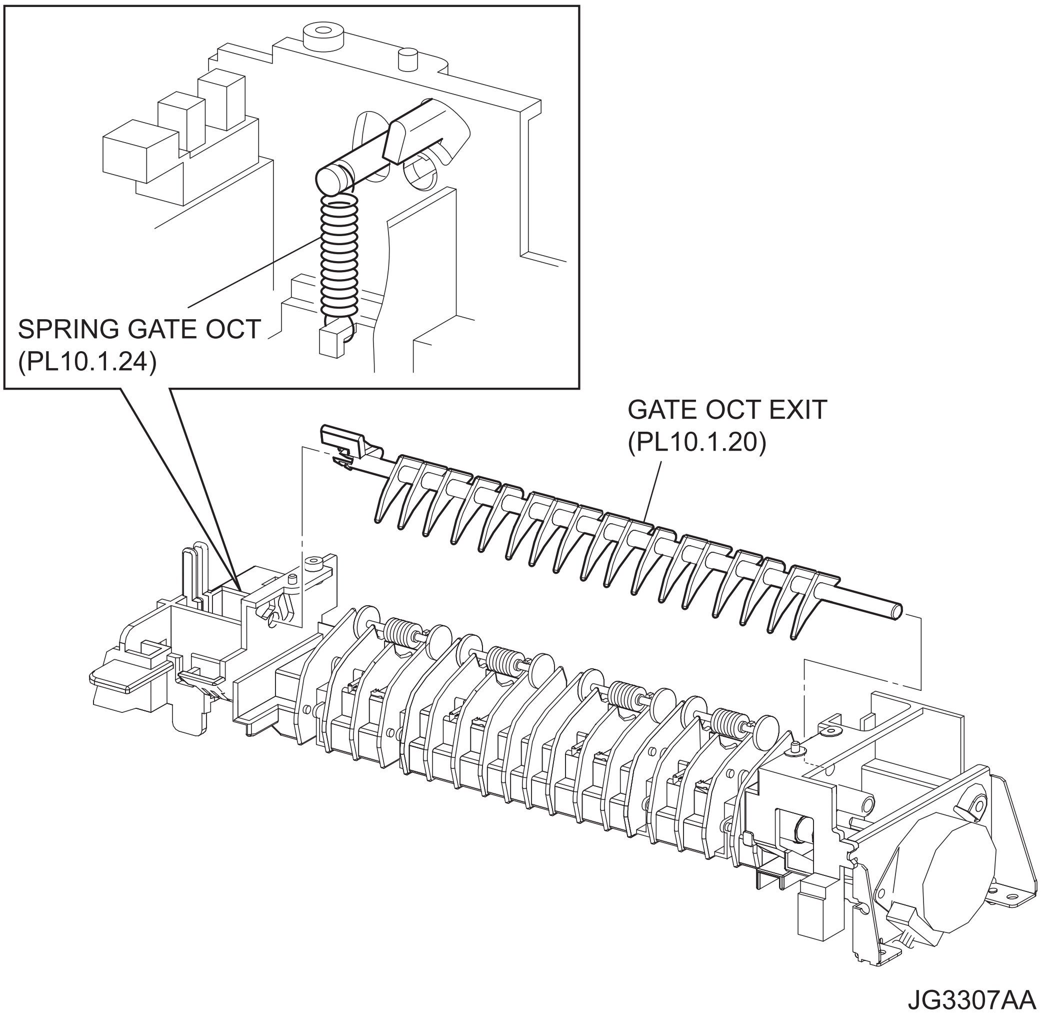
1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the 5 screws (gold tapping, 6mm) securing the CHUTE LOW FU (PL10.2.7) to the COVER REAR 550.
3) Release the hooks of the COVER REAR 550, and remove the CHUTE LOW FU from the COVER REAR 550.
4) Remove the LEVER GATE HOLDER (PL10.2.15),SPRING LEVER GATE (PL10.2.16), and LEVER GATE FU (PL10.2.17).(RRP10.11)
5) Remove the 2 screws (gold tapping,6mm) securing the CHUTE UP FU (PL10.2.2).
6) Remove the GATE FU (PL10.2.6) from CHUTE LOW FU (PL10.2.7) by bending GATE FU (PL10.2.6).

NOTE **Be careful handling the GATE FU. It is fragile and could break if given excessive force.**

Replacement

1) Install the GATE FU (PL10.2.6) to CHUTE LOW FU (PL10.2.7).
2) Secure the CHUTE UP FU using the 5 screws (gold tapping, 6mm).
3) Install the LEVER GATE HOLDER (PL10.2.15), SPRING LEVER GATE (PL10.2.16), and LEVER GATE FU (PL10.2.17).(RRP10.11).
4) Install the ROLL FU to the BEARING EXIT (PL22.1.13) on the opposite side of the GEAR 21 (PL10.2.12) by shifting the ROLL FU in the opposite direction of the arrow.
5) Install the CHUTE LOW FU to the COVER REAR 550, and secure it with the hook.
6) Secure the CHUTE LOW FU to the COVER REAR 550 using the 5 screws (gold tapping, 6mm).
7) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

RRP10.15 GATE OCT EXIT (PL10.1.20)


SPRING GATE OCT
(PL10.1.24)
GATE OCT EXIT
(PL10.1.20)
JG3307AA

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
6) Remove the 500 EXIT ASSY (PL10.1.2). (RRP10.2)
7) Remove the CHUTE LOW EXIT (PL10.1.21). (RRP10.3)
8) Remove the SPRING GATE OCT (PL10.1.24).
9) Bend GATE OCT EXIT (PL10.1.20), and remove the it from CHUTE LOW EXIT.

Replacement

1) Install the GATE OCT EXIT (PL10.1.20).
2) Install the SPRING GATE OCT (PL10.1.24).
3) Install the CHUTE LOW EXIT (PL10.1.21). (RRP10.3)
4) Install the 500 EXIT ASSY (PL10.1.2). (RRP10.2)
5) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
6) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
7) Install the COVER LEFT (PL1.1.6). (RRP1.3)
8) Install the COVER REAR (PL1.1.3). (RRP1.1)

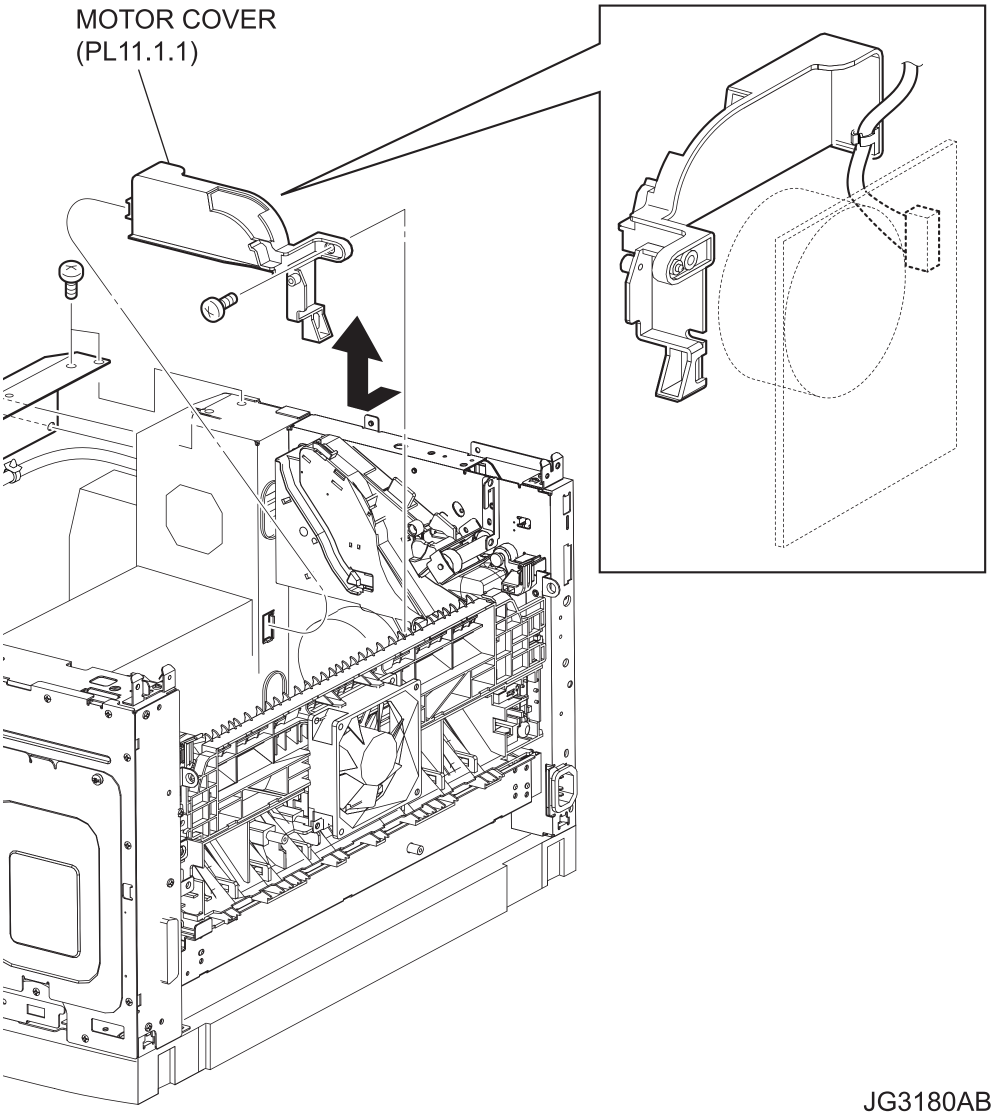
NOTE

There are 2 kinds of screws, make sure they are put in the right place.

9) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

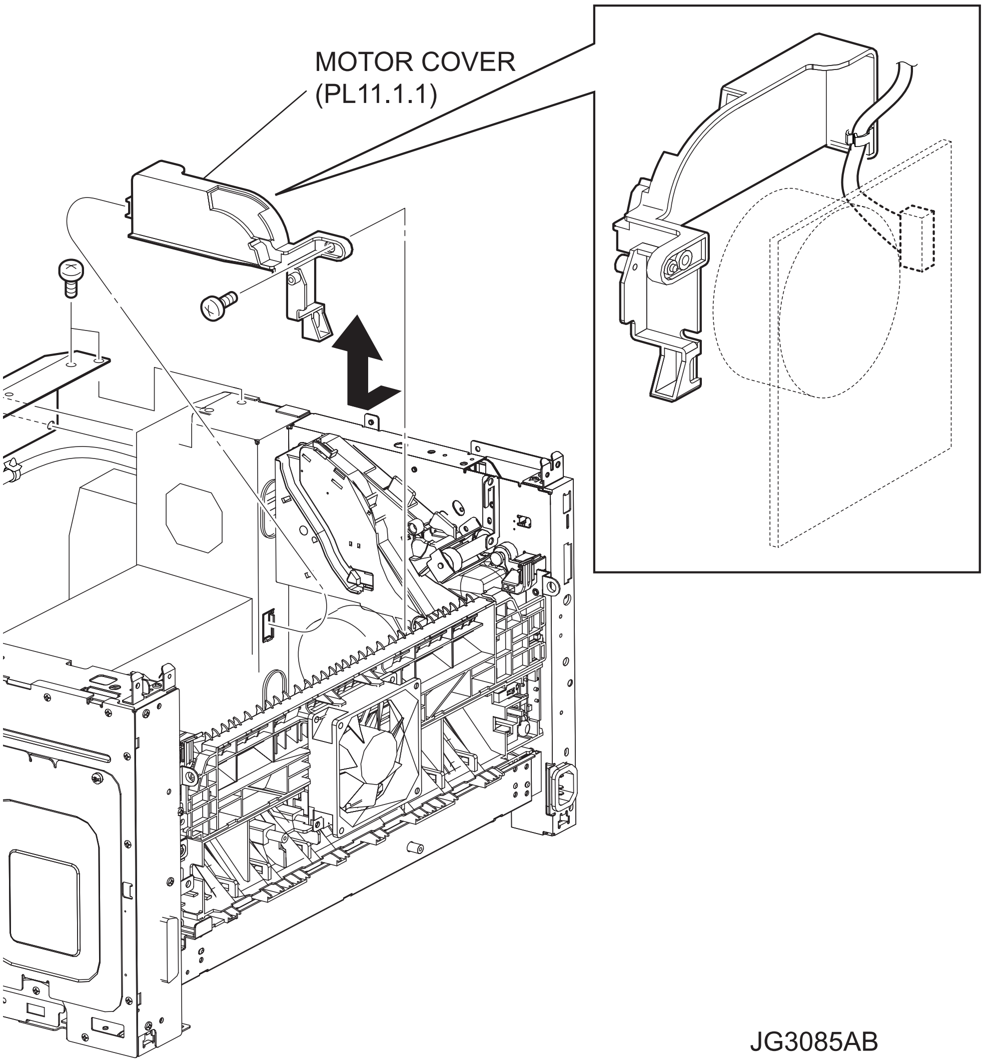
RRP11.Frame & Drive

RRP11.1 MOTOR COVER (PL11.1.1)


MOTOR COVER
(PL11.1.1)

JG3180AB

(34PPM)


MOTOR COVER
(PL11.1.1)
JG3085AB

(24PPM)

34PPM

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
5) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
6) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
7) Remove the 500 EXIT ASST (PL10.1.2). (RRP10.2)
8) Remove the COVER TOP (PL1.1.7). (RRP1.4)
9) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
10) Remove the BTR ASSY (PL8.1.21). (RRP8.10)
11) Remove the GUIDE TRAY LEFT (PL7.1.7). (RRP7.8)
12) Remove the DUCT FRONT (PL8.1.4). (RRP8.2)
13) Remove the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

14) Remove the SHIELD PLATE ROS (PL9.1.3). (RRP8.3)
15) While lifting up the 150 FEEDER ASSY, remove the screw (silver, 6mm) securing the MOTOR COVER to the frame.
16) Remove the harness connector of MAIN MOTOR.
17) Remove the MOTOR COVER.

Replacement

1) Install the MOTOR COVER to the frame using the screw (silver, 6mm).
2) Install the harness connector of MAIN MOTOR.
3) Install the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
4) Install the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

5) Install the DUCT FRONT (PL8.1.4). (RRP8.2)
6) Install the GUIDE TRAY LEFT (PL7.1.7). (RRP7.8)
7) Install the COVER FRONT (PL1.1.5). (RRP1.5)
8) Install the COVER TOP (PL1.1.7). (RRP1.4)
9) Install the 500 EXIT ASST (PL10.1.2). (RRP10.2)
10) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
11) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
12) Install the COVER LEFT (PL1.1.6). (RRP1.3)
13) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
14) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

15) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)
16) Install the BTR ASSY (PL8.1.21). (RRP8.10)

24PPM

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
5) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
6) Remove the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
7) Remove the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
8) Remove the COVER TOP (PL1.1.7). (RRP1.4)
9) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
10) Remove the BTR ASSY (PL8.1.21). (RRP8.10)
11) Remove the GUIDE TRAY LEFT (PL6.1.7 or PL7.1.7). (RRP6.8 or RRP7.8)
12) Remove the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

13) Remove the SHIELD PLATE ROS (PL9.1.3). (RRP8.3)
14) While lifting up the 150 FEEDER ASSY, remove the screw (silver, 6mm) securing the MOTOR COVER to the frame.
15) Remove the harness connector of MAIN MOTOR.
16) Remove the MOTOR COVER.

Replacement

1) Install the MOTOR COVER to the frame using the screw (silver, 6mm).
2) Install the harness connector of MAIN MOTOR.
3) Install the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
4) Install the ROS ASSY (PL8.1.1). (RRP8.1)

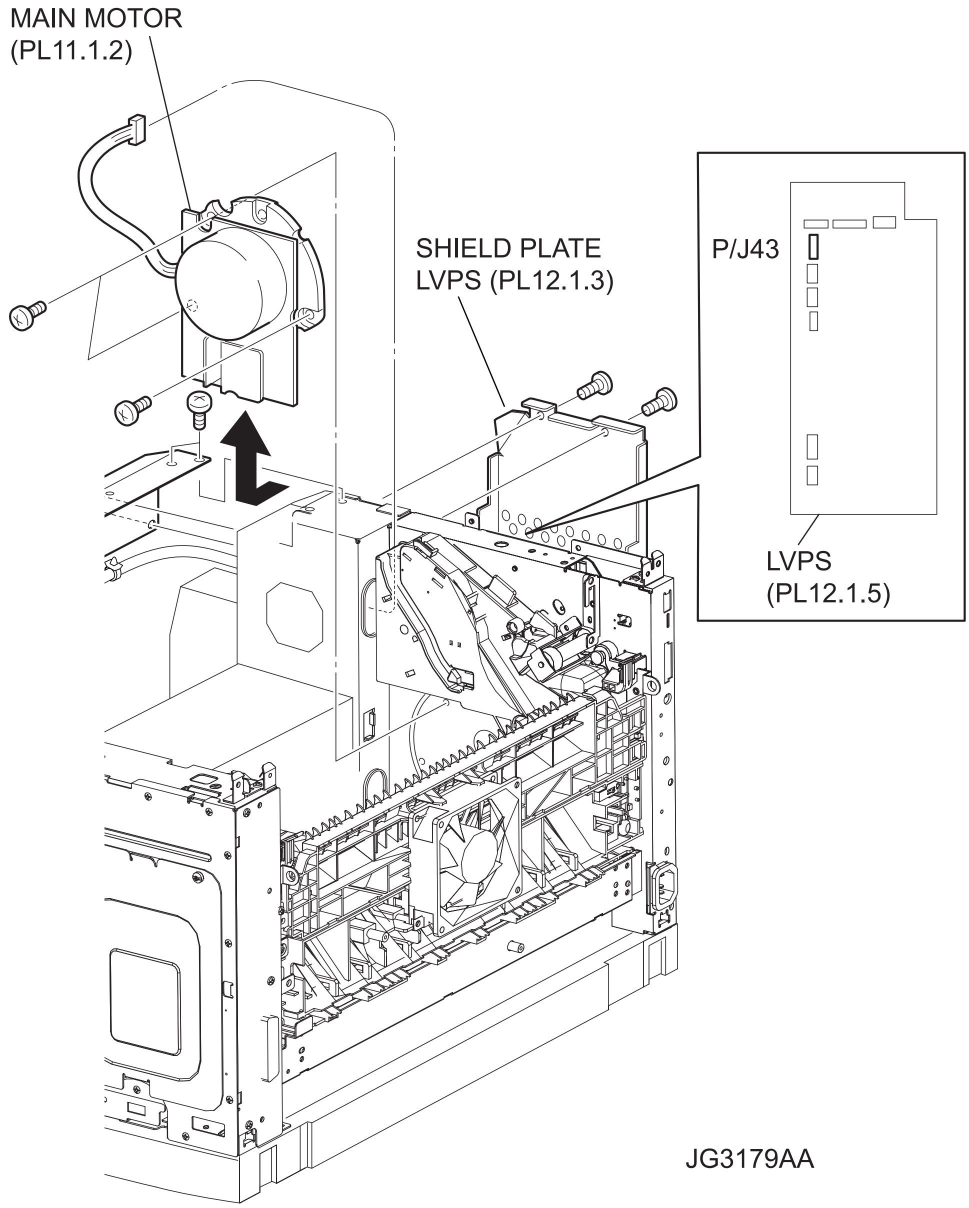
NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

5) Install the GUIDE TRAY LEFT (PL6.1.7 or PL7.1.7). (RRP6.8 or RRP7.8)
6) Install the COVER FRONT (PL1.1.5). (RRP1.5)
7) Install the COVER TOP (PL1.1.7). (RRP1.4)
8) Install theCHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)
9) Install the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
10) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
11) Install the COVER LEFT (PL1.1.6). (RRP1.3)
12) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
13) Install the COVER REAR (PL1.1.3). (RRP1.1)

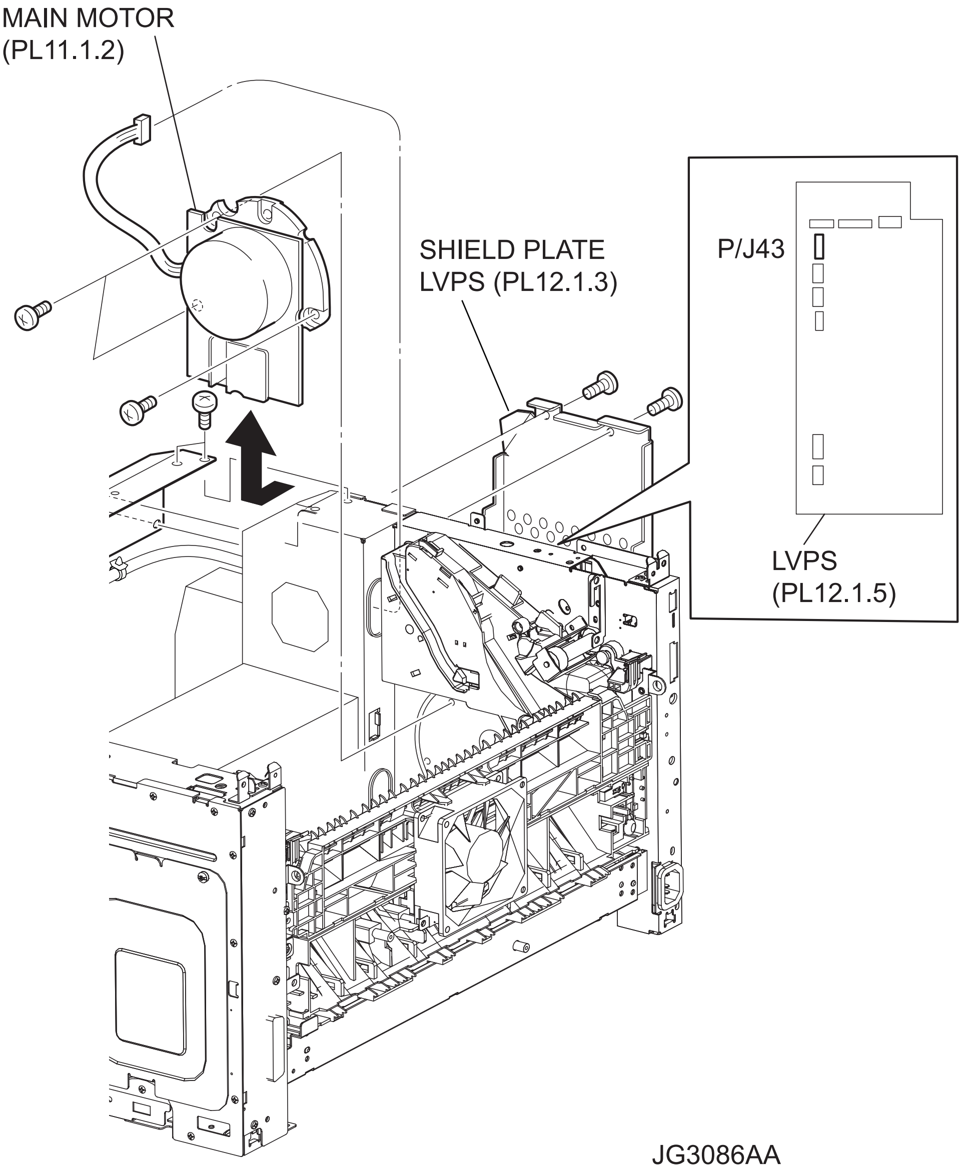
NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

14) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)
15) Install the BTR ASSY (PL8.1.21). (RRP8.10)

RRP11.2 MAIN MOTOR (PL11.1.2)


MAIN MOTOR
(PL11.1.2)
SHIELD PLATE
LVPS (PL12.1.3)
P/J43
LVPS
(PL12.1.5)
JG3179AA

(34PPM)


MAIN MOTOR
(PL11.1.2)
SHIELD PLATE
LVPS (PL12.1.3)
P/J43
LVPS
(PL12.1.5)
JG3086AA

(24PPM)

34PPM

Removal

1) Remove the COVER REAR 500 (PL10.2.21). (RRP10.9)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
5) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
6) Remove the COVER EXIT 500 (PL10.1.1). (RRP10.1)
7) Remove the 500 EXIT ASST (PL10.1.2). (RRP10.2)
8) Remove the COVER TOP (PL1.1.7). (RRP1.4)
9) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
10) Remove the BTR ASSY (PL8.1.21). (RRP8.10)
11) Remove the DUCT FRONT (PL8.1.4). (RRP8.2)
12) Remove the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

13) Remove the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
14) Remove the GUIDE TRAY LEFT (PL7.1.7). (RRP7.8)
15) Remove the MOTOR COVER (PL11.1.1). (RRP11.1)
16) Remove the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
17) Disconnect the connector (P/J43) of the MAIN MOTOR from the LVPS (PL12.1.5).
18) Lift up the 150 FEEDER ASSY (PL6.1.12).

NOTE **Althrough the 150 FEEDER ASSY clicks into midway when lifted up, push it a little bit further.**

19) Remove the 3 screws (gold, 6mm) securing the MAIN MOTOR to the frame.
20) Remove the MAIN MOTOR.

Replacement

1) Install the MAIN MOTOR to the frame using the 3 screws (gold, 6mm).
2) Connect the connector (P/J43) of the MAIN MOTOR to the LVPS (PL12.1.5).
3) Install the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
4) Install the MOTOR COVER (PL11.1.1). (RRP11.1)
5) Install the GUIDE TRAY LEFT (PL7.1.7). (RRP7.8)
6) Install the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
7) Install the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

8) Install the DUCT FRONT (PL8.1.4). (RRP8.2)
9) Install the COVER FRONT (PL1.1.5). (RRP1.5)
10) Install the COVER TOP (PL1.1.7). (RRP1.4)
11) Install the500 EXIT ASST (PL10.1.2). (RRP10.2)
12) Install the COVER EXIT 500 (PL10.1.1). (RRP10.1)
13) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
14) Install the COVER LEFT (PL1.1.6). (RRP1.3)
15) Install the FUSER ASSY (PL8.1.20). (RRP8.8)

16) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

17) Install the COVER REAR 500 (PL10.2.21). (RRP10.9)

18) Install the BTR ASSY (PL8.1.21). (RRP8.10)

24PPM

Removal

1) Remove the COVER REAR 250 (PL9.1.12). (RRP9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
5) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
6) Remove the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
7) Remove the CHUTE LW EXIT ASST (PL9.1.2). (RRP9.1)
8) Remove the COVER TOP (PL1.1.7). (RRP1.4)
9) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
10) Remove the BTR ASSY (PL8.1.21). (RRP8.10)
11) Remove the GUIDE TRAY LEFT (PL6.1.7 or PL7.1.7). (RRP6.8 or RRP7.8)
12) Remove the DUCT FRONT (PL8.1.4). (RRP8.2)
13) Remove the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

14) Remove the SHIELD PLATE ROS (PL9.1.3). (RRP8.3)
15) Remove the MOTOR COVER (PL11.1.1). (RRP11.1)
16) Remove the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
17) Disconnect the connector (P/J43) of the MAIN MOTOR from the LVPS (PL12.1.5).
18) Lift up the 150 FEEDER ASSY (PL6.1.12).

NOTE **Althrough the 150 FEEDER ASSY clicks into midway when lifted up, push it a little bit further.**

19) Remove the 3 screws (gold, 6mm) securing the MAIN MOTOR to the frame.
20) Remove the MAIN MOTOR.

Replacement

1) Lift up the 150 FEEDER ASSY (PL6.1.12).

NOTE **Althrough the 150 FEEDER ASSY clicks into midway when lifted up, push it a little bit further.**

2) Install the MAIN MOTOR to the frame using the 3 screws (gold, 6mm).
3) Connect the connector (P/J43) of the MAIN MOTOR to the LVPS (PL12.1.5).
4) Install the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
5) Install the MOTOR COVER (PL11.1.1). (RRP11.1)
6) Install the SHIELD PLATE ROS (PL8.1.3). (RRP8.3)
7) Install the ROS ASSY (PL8.1.1). (RRP8.1)

NOTE **Never give any impact to the ROS ASSY with a screwdriver or other tools.**

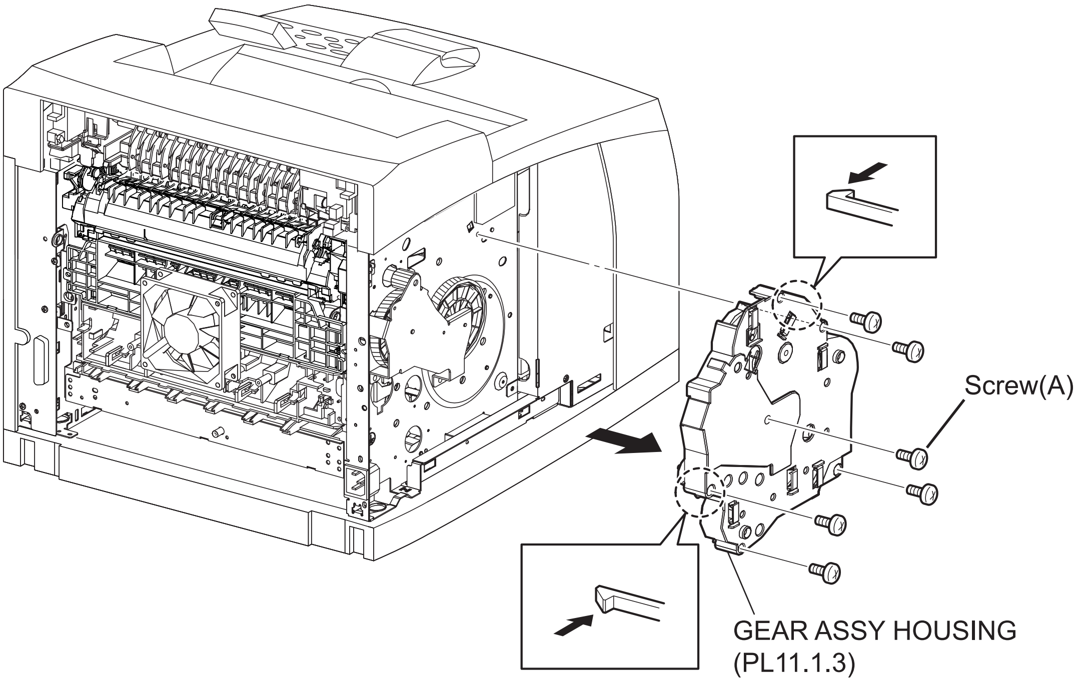
8) Install the DUCT FRONT (PL8.1.4). (RRP8.2)
9) Install the GUIDE TRAY LEFT (PL6.1.7 or PL7.1.7). (RRP6.8 or RRP7.8)
10) Install the COVER FRONT (PL1.1.5). (RRP1.5)
11) Install the COVER TOP (PL1.1.7). (RRP1.4)
12) Install the CHUTE LW EXT2 ASSY (PL9.1.2). (RRP9.1)

13) Install the CHUTE ASSY EXIT 250 (Reference Only) (PL9.1.14). (RRP9.7)
14) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
15) Install the COVER LEFT (PL1.1.6). (RRP1.3)
16) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
17) Install the COVER REAR (PL1.1.3). (RRP1.1)

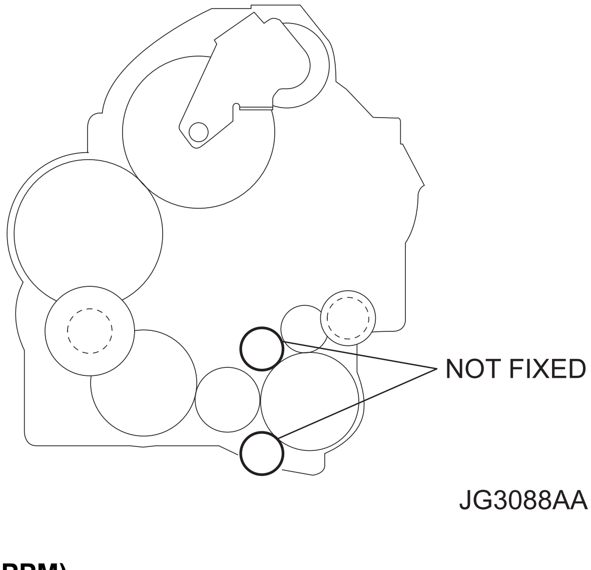
NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

18) Install the COVER REAR 250 (PL9.1.12). (RRP9.4)
19) Install the BTR ASSY (PL8.1.21). (RRP8.10)

RRP11.3   GEAR ASSY HOUSING (PL11.1.3)

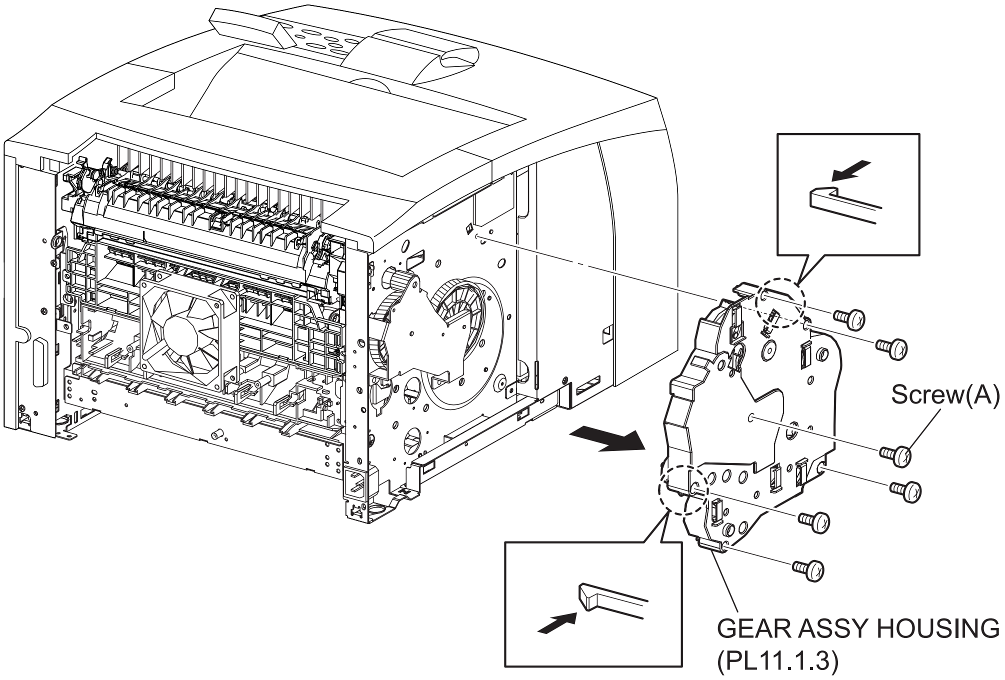

Screw(A)
GEAR ASSY HOUSING
(PL11.1.3)

JG3162AA

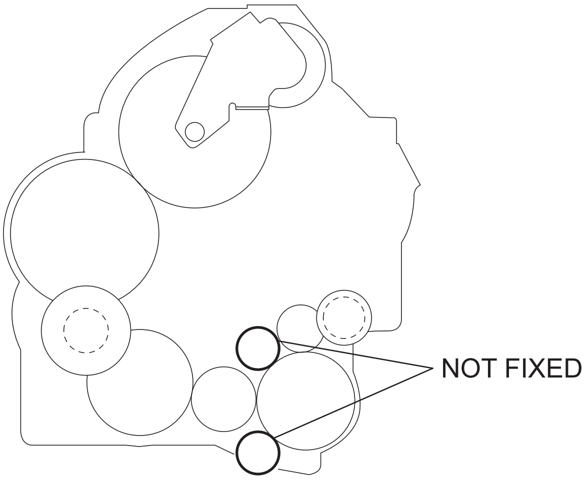


JG3088AA

(34PPM)


Screw(A)
GEAR ASSY HOUSING
(PL11.1.3)

JG3087AA



JG3088AA

(24PPM)

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Release the holding of the HARNESS ASSY INTERLOCK2 and HARNESS ASSY LVPS from the clamps on the GEAR ASSY HOUSING.
5) Remove the 6 screws (silver, 6mm x 5, gold, 6mm x 1) securing the GEAR ASSY HOUSING to the frame.
6) Release the hooks of the GEAR ASSY HOUSING, and remove it from the frame.

NOTE

When removing the GEAR ASSY HOUSING, two of the gears that are installed to the GEAR ASSY HOUSING are not fixed and they may come off. Be careful not to drop them.

Replacement

1) Install the GEAR ASSY HOUSING to the frame.

NOTE

When installing, two of the gears that are installed to the GEAR ASSY HOUSING are not fixed and they may come off. Be careful not to drop them.

NOTE

When installing, engage the gears of the GEAR ASSY HOUSING, MAIN MOTOR, and GEAR ASSY PLATE. After assembling, check the engagement of the gears. The gears will engage easily when they are assembled, by rotating the MAIN MOTOR with hand.

2) Install the GEAR ASSY HOUSING to the frame using the 6 screws (silver, 6mm x 5, gold, 6mm x 1).

NOTE

Be sure to tighten the screw (gold, 8mm) shown as “Screw (A)” in the figure.

3)Secure the HARNESS ASSY INTERLOCK2 and HARNESS ASSY LVPS (PL12.1.1) using the clampers on the GEAR ASSY HOUSING.

4) Install the COVER LEFT (PL1.1.6). (RRP1.3)
5) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

There are 2 kinds of screws, make sure they are put in the right place.

6) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)

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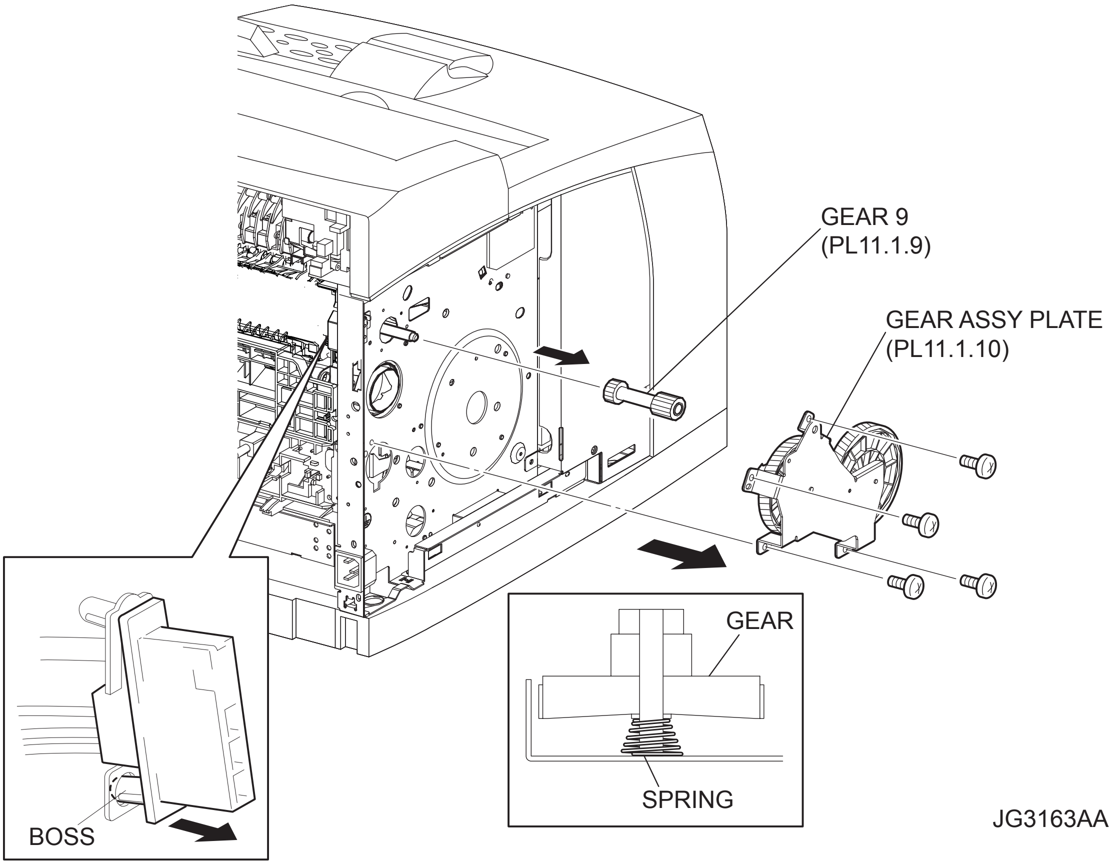
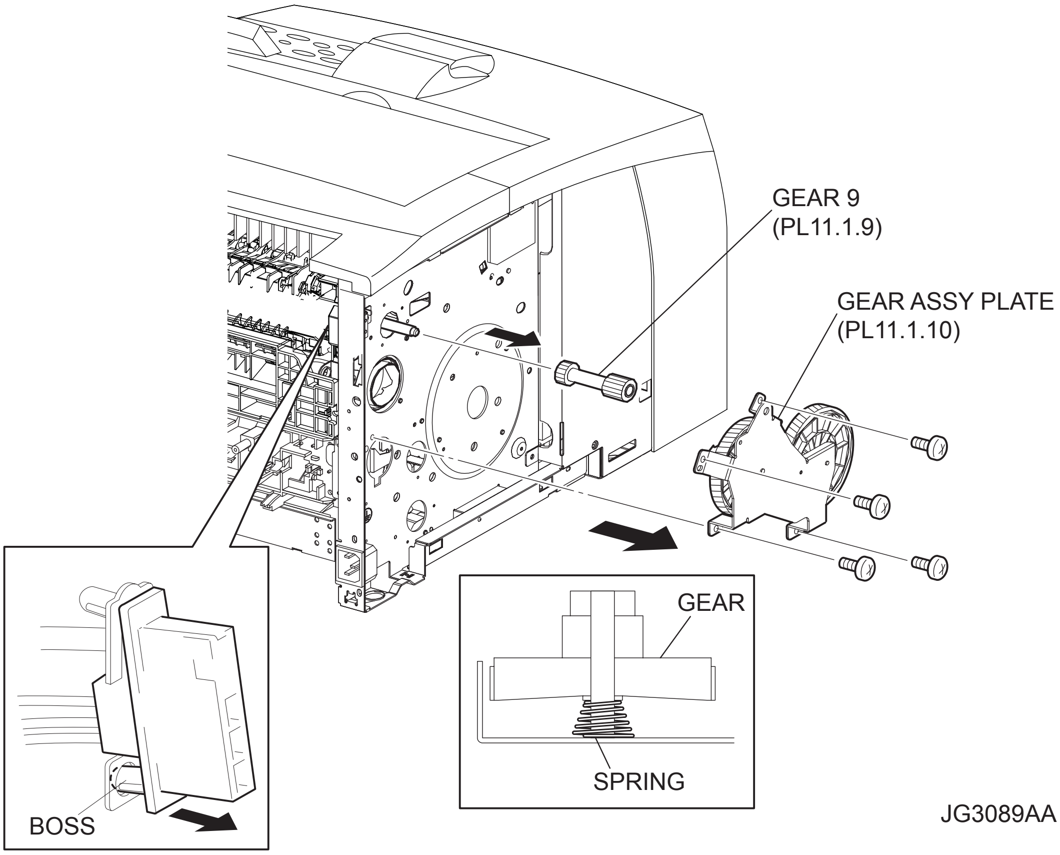
RRP11.4 GEAR ASSY PLATE (PL11.1.10), GEAR 9 (PL11.1.9)


GEAR 9
(PL11.1.9)
GEAR ASSY PLATE
(PL11.1.10)
GEAR
SPRING
BOSS
JG3163AA

(34PPM)


GEAR 9
(PL11.1.9)
GEAR ASSY PLATE
(PL11.1.10)
GEAR
SPRING
BOSS
JG3089AA

(24PPM)

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the FUSER ASSY (PL8.1.20). (RRP8.8)
4) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
5) Remove the GEAR ASSY HOUSING (PL11.1.3). (RRP11.3)
6) Remove the 4 screws (silver, 6mm) securing the GEAR ASSY PLATE to the frame.
7) Remove the GEAR ASSY PLATE.
8) Remove the boss of the bottom side of the connector of the HARNESS ASSY FUSER from the frame.
9) Remove the GEAR 9 (PL11.1.9) from the shaft on the frame.

NOTE **When removing the GEAR ASSY PLATE, one of the gears that are installed to the GEAR ASSY PLATE is not fixed and it may come off. Be careful not to drop it.**

NOTE **There is a SPRING inside of the GEAR that is not fixed to the GEAR ASSY PLATE. Be careful not to drop this SPRING.**

Replacement

1) Install the GEAR 9 (PL11.1.9) to the shaft on the frame.

NOTE **When installing the GEAR 9, be sure to install the narrow end of the GEAR inside.**

2) Install the boss which is under the connector of HARNESS ASSY FUSER to the frame.
3) Install the GEAR ASST PLATE to the frame using the 4 screws (silver, 6mm).

NOTE **When installing, if the GEAR or the SPRING that are not fixed to the GEAR ASSY PLATE come off, re-install them in the direction shown in the figure.**

4) Install the GEAR ASSY HOUSING (PL11.1.3). (RRP11.3)

NOTE **When installing, two of the gears that are installed to the GEAR ASSY HOUSING are not fixed and they may come off. Be careful not to drop them.**

NOTE **When installing, engage the gears of the GEAR ASSY HOUSING, MAIN MOTOR, and GEAR ASSY PLATE. After assembling, check the engagement of the gears. The gears will engage easily when they are assembled, by rotating the MAIN MOTOR with hand.**

5) Insert the boss of the bottom side of the connector of the HARNESS ASSY FUSER to the frame.
6) Install the COVER LEFT (PL1.1.6). (RRP1.3)
7) Install the FUSER ASSY (PL8.1.20). (RRP8.8)
8) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

9) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)

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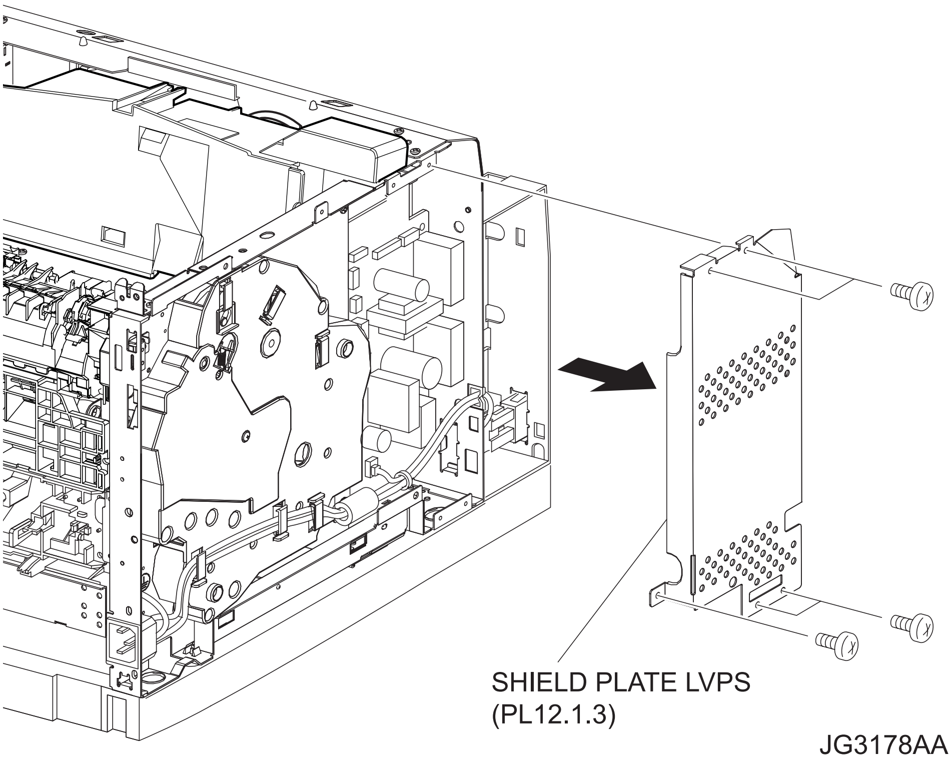
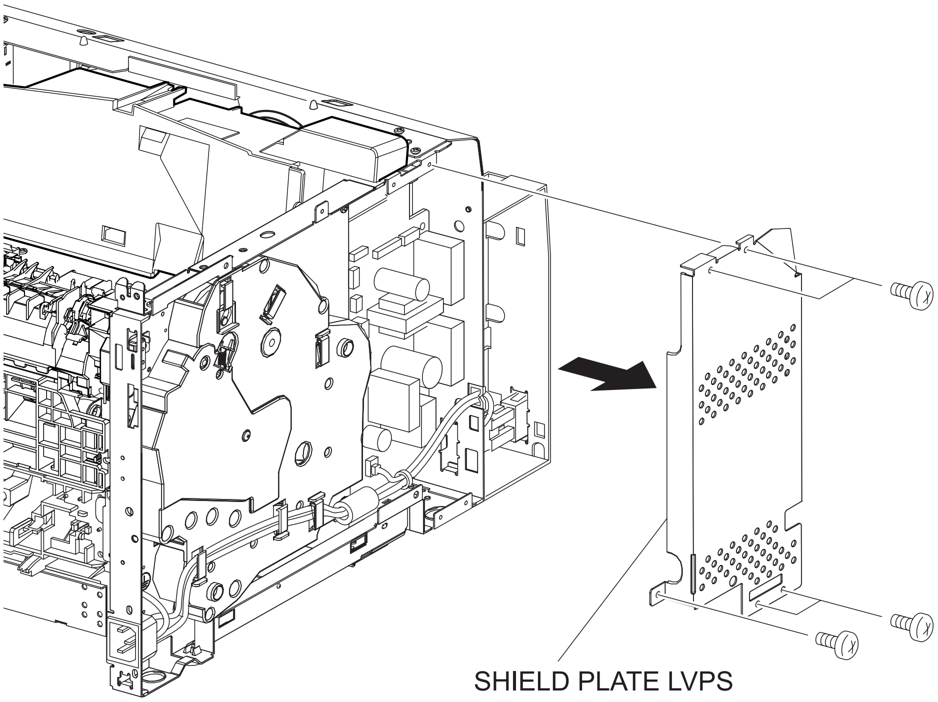
RRP12. Electrical

RRP12.1   SHIELD PLATE LVPS (PL12.1.3)


SHIELD PLATE LVPS
(PL12.1.3)
JG3178AA

(34PPM)


SHIELD PLATE LVPS
(PL12.1.3)
JG3090AA

(24PPM)

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the COVER EXIT 500 (PL10.1.1)/CHUTE ASSY EXIT 250 (Reference Only). (PL9.1.14) (RRP10.1/9.7)
6) Remove the 500 EXIT ASSY (PL10.1.2)/CHUTE LW EXT2 ASSY (PL9.1.2). (RRP10.2/9.1)
7) Remove the COVER TOP (PL1.1.7). (RRP1.4)
8) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
9) Remove the 5 screws (silver, 6mm) securing the SHIELD PLATE LVPS to the frame.
10) Remove the SHIELD PLATE LVPS.

Replacement

1) Install the SHIELD PLATE LVPS to the frame using the 5 screws (silver, 6mm).
2) Install the COVER FRONT (PL1.1.5). (RRP1.5)
3) Install the COVER TOP (PL1.1.7). (RRP1.4)
4) Install the 500 EXIT ASSY (PL10.1.2)/CHUTE LW EXIT ASST (PL9.1.2). (RRP10.2/9.1)

NOTE

When installing, pull the CHUTE EXIT FUSER lever.

5) Install the COVER EXIT 500 (PL10.1.1)/CHUTE ASSY EXIT 250 (Reference Only). (PL9.1.14) (RRP10.1/9.7)
6) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
7) Install the COVER LEFT (PL1.1.6). (RRP1.3)
8) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

There are 2 kinds of screws, make sure they are put in the right place.

9) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)

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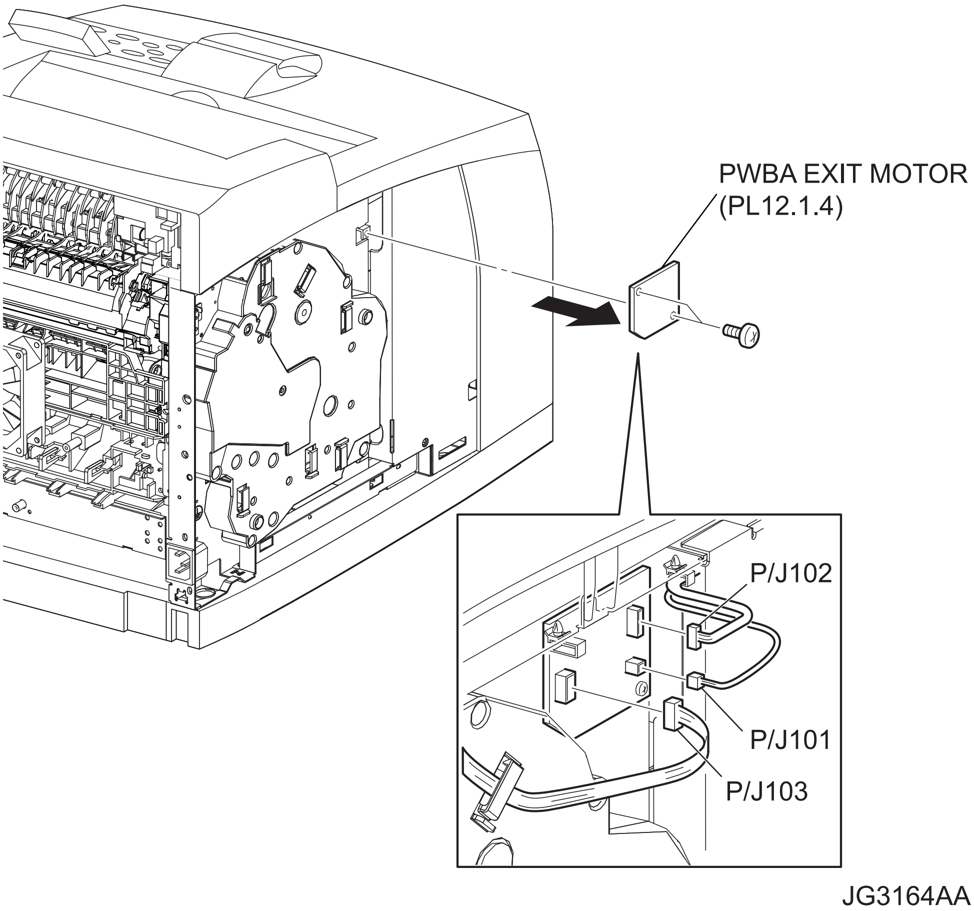
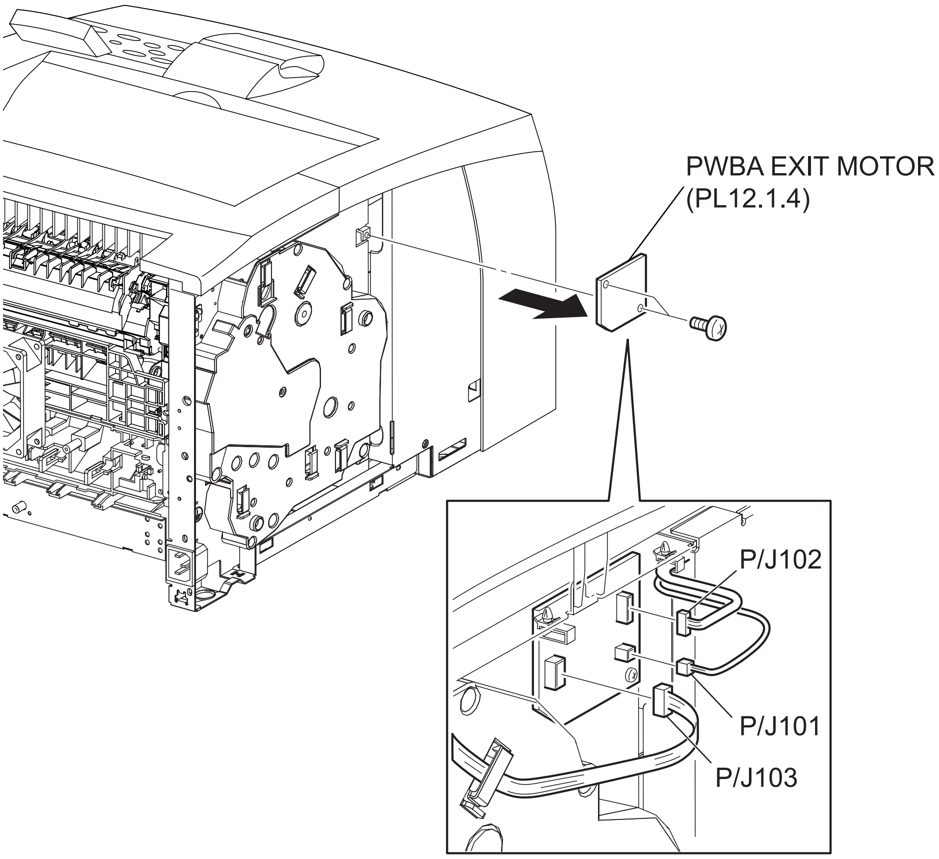
RRP12.2   PWBA EXIT MOTOR (PL12.1.4)


PWBA EXIT MOTOR
(PL12.1.4)
P/J102
P/J101
P/J103
JG3164AA

(34PPM)


PWBA EXIT MOTOR
(PL12.1.4)
P/J102
P/J101
P/J103

JG3091AA

(24PPM)

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Disconnect the harnesses from the connectors (P/J101, P/J102 and P/J103) on the PWBA EXIT MOTOR.
5) Remove the 2 screws (silver, 6mm) securing the PWBA EXIT MOTOR to the frame.
6) Remove the PWBA EXIT MOTOR.

Replacement

1) Install the PWBA EXIT MOTOR to the frame using the 2 screws (silver, 6mm).
2) Connect the harness connectors to the connectors (P/J101, P/J102 and P/J103) on the PWBA EXIT MOTOR.
3) Install the COVER LEFT (PL1.1.6). (RRP1.3)
4) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

There are 2 kinds of screws, make sure they are put in the right place.

5) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)

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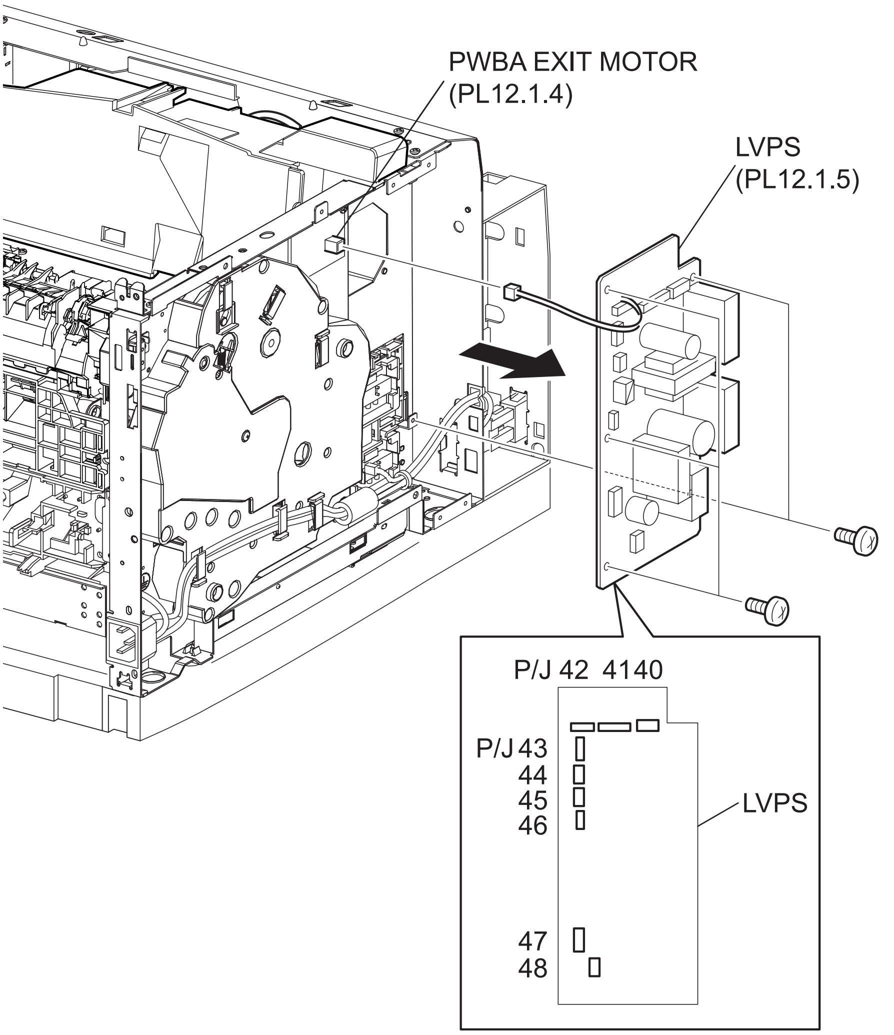
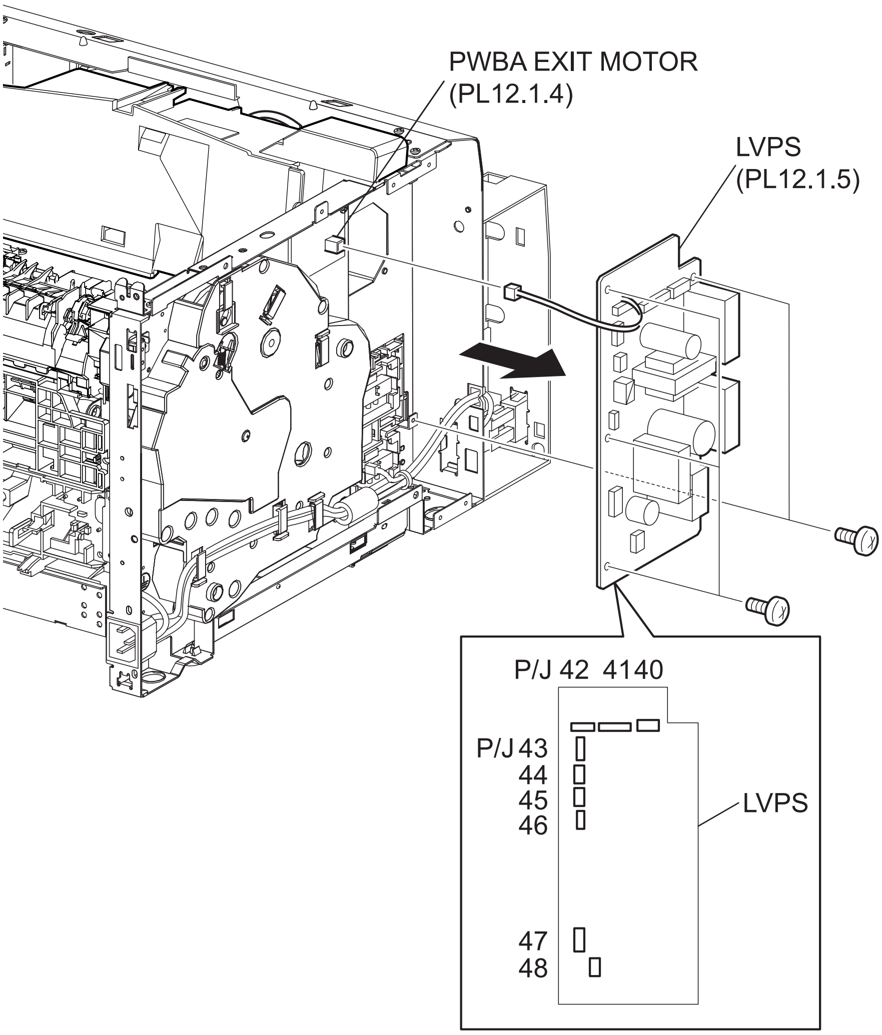
RRP12.3   LVPS (PL12.1.5)


PWBA EXIT MOTOR
(PL12.1.4)
LVPS
(PL12.1.5)
P/J 42 41 40
P/J 43
44
45
46
47
48
LVPS

JG3177AA

(34PPM)


PWBA EXIT MOTOR
(PL12.1.4)
LVPS
(PL12.1.5)
P/J 42 4140
P/J 43
44
45
46
47
48
LVPS

JG3092AA

(24PPM)

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the COVER EXIT 500 (PL10.1.1)/CHUTE ASSY EXIT 250 (Reference Only). (PL9.1.14) (RRP10.1/9.7)
6) Remove the 500 EXIT ASSY (PL10.1.2)/CHUTE LW EXT2 ASSY (PL9.1.2). (RRP10.2/9.1)
7) Remove the COVER TOP (PL1.1.7). (RRP1.4)
8) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
9) Remove the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
10) Disconnect the harness connector from the connector (P/J101) on the PWBA EXIT MOTOR (PL12.1.4).
11) Disconnect the harness connectors from the connectors (P/J40, P/J41, P/J42, P/J43, P/J44, P/J45, P/J46, P/J47 and P/J48) on the LVPS.
12) Remove the 5 screws (silver, 6mm) securing the LVPS to the frame.
13) Remove the LVPS.

Replacement

1) Install the LVPS to the frame using the 5 screws (silver, 6mm).
2) Connect the harness connectors to the connectors (P/J40, P/J41, P/J42, P/J43, P/J44, P/J45, P/J46, P/J47 andP/J48) on the LVPS.
3) Connect the connector of the harness LVPS to the connector (P/J101) on the PWBA EXIT MOTOR (PL12.1.4).
4) Install the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
5) Install the COVER FRONT (PL1.1.5). (RRP1.5)
6) Install the COVER TOP (PL1.1.7). (RRP1.4)
7) Install the 500 EXIT ASSY (PL10.1.2)/CHUTE LW EXT2 ASSY (PL9.1.2). (RRP10.2/9.1)
8) Install the COVER EXIT 500 (PL10.1.1)/CHUTE ASSY EXIT 250 (Reference Only). (PL9.1.14) (RRP10.1/9.7)

NOTE

When installing, pull the CHUTE EXIT FUSER lever.

9) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
10) Install the COVER LEFT (PL1.1.6). (RRP1.3)
11) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

There are 2 kinds of screws, make sure they are put in the right place.

12) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)

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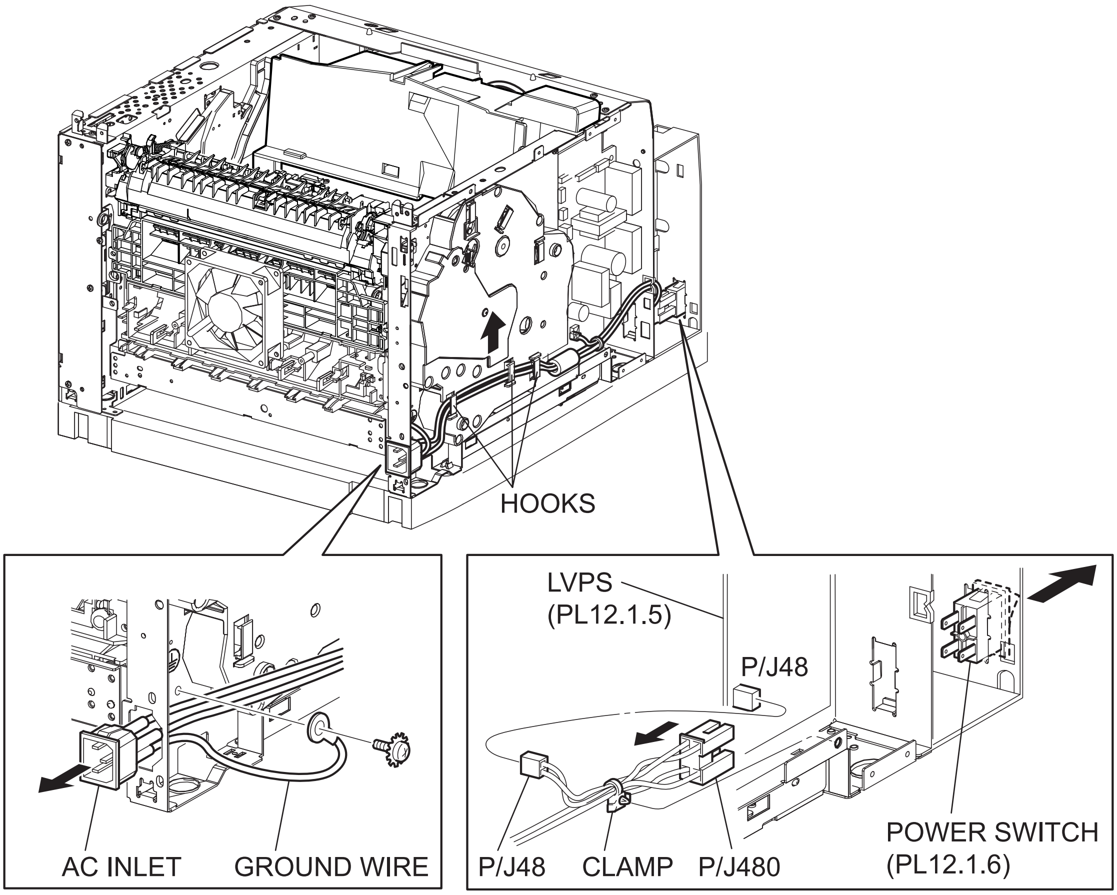
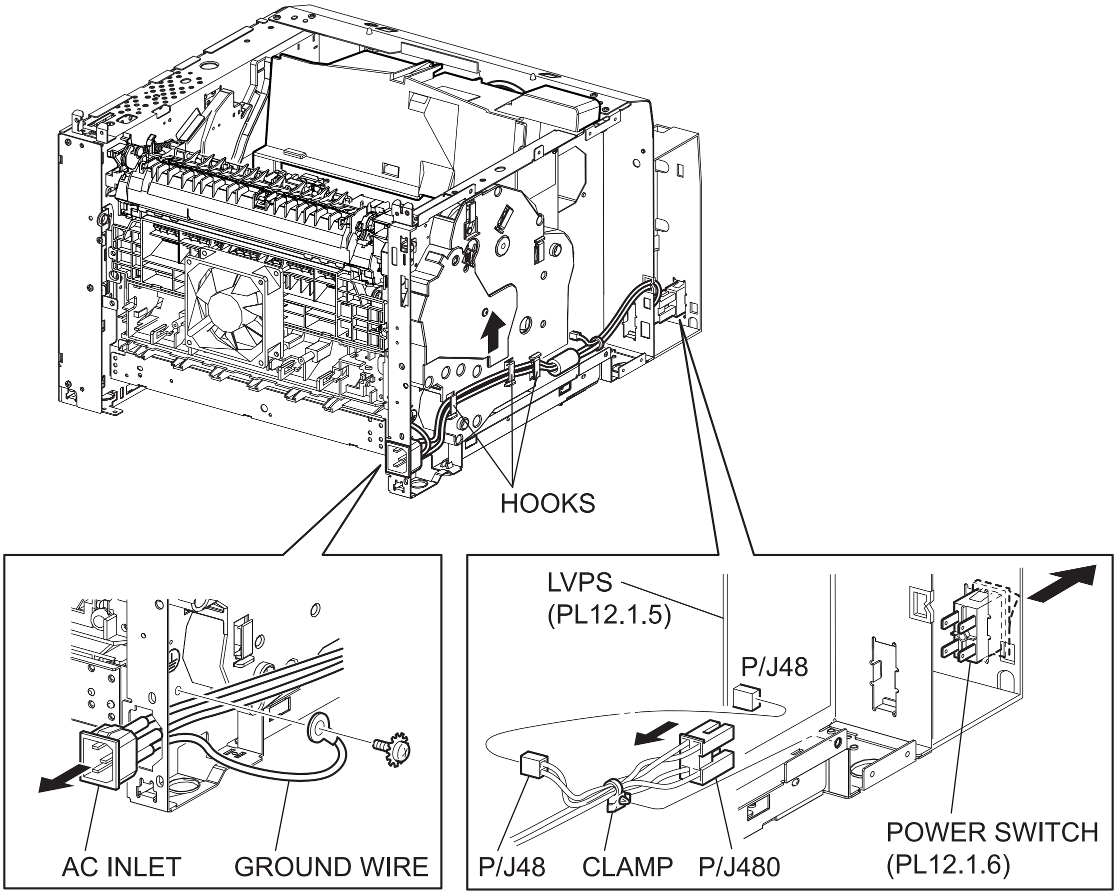
RRP12.4 POWER SWITCH (PL12.1.6), HARNESS ASSY AC100V/AC200V (PL12.1.8)


HOOKS
LVPS
(PL12.1.5)
P/J48
AC INLET
GROUND WIRE
P/J48
CLAMP
P/J480
POWER SWITCH
(PL12.1.6)

JG3176AA

(34PPM)


HOOKS
LVPS
(PL12.1.5)
P/J48
AC INLET
GROUND WIRE
P/J48
CLAMP
P/J480
POWER SWITCH
(PL12.1.6)

JG3093AA

(24PPM)

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the COVER EXIT 500 (PL10.1.1)/CHUTE ASSY EXIT 250 (Reference Only). (PL9.1.14) (RRP10.1/9.7)
6) Remove the 500 EXIT ASSY (PL10.1.2)/CHUTE LW EXT2 ASSY (PL9.1.2). (RRP10.2/9.1)
7) Remove the COVER TOP (PL1.1.7). (RRP1.4)
8) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
9) Remove the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
10) Release the clamp of the HARNESS ASSY AC100V/AC200V from the clampers on the GEAR ASSY HOUSING (PL11.1.3).
11) Disconnect the connector (P/J480) of the HARNESS ASSY AC100V/AC200V from the POWER SWITCH.
12) Disconnect the connector (P/J48) of the HARNESS ASSY AC100V/AC200V from the LVPS (PL12.1.5).
13) Release the clamp of the HARNESS ASSY AC100V/AC200V,
14) Remove the screw (silver with toothed washer, 6mm) securing the ground terminal of the HARNESS ASSY AC100V/AC200V to the frame.
15) Pull out the HARNESS ASSY AC100V/AC200V from the hole at the rear of the frame.
16) Remove the POWER SWITCH from the frame.

Replacement

1) Install the POWER SWITCH to the frame.
2) Install the HARNESS ASSY AC100V/AC200V to the hole at the rear of the frame.
3) Secure the ground terminal of the HARNESS ASSY AC100V/AC200V to the frame using the screw (silver with toothed washer, 6mm).
4) Secure the HARNESS ASSY AC100V/AC200V.
5) Connect the connector (P/J48) of the HARNESS ASSY AC100V/AC200V to the LVPS (PL12.1.5).
6) Connect the connector (P/J480) of the HARNESS ASSY AC100V/AC200V to the POWER SWITCH.
7) Secure the HARNESS ASSY AC100V/AC200V using the clampers of the GEAR ASSY HOUSING (PL11.1.3).
8) Install the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
9) Install the COVER FRONT (PL1.1.5). (RRP1.5)
10) Install the COVER TOP (PL1.1.7). (RRP1.4)
11) Install the 500 EXIT ASSY (PL10.1.2)/CHUTE LW EXT2 ASSY (PL9.1.2). (RRP10.2/9.1)

NOTE **When installing, pull the CHUTE EXIT FUSER lever.**

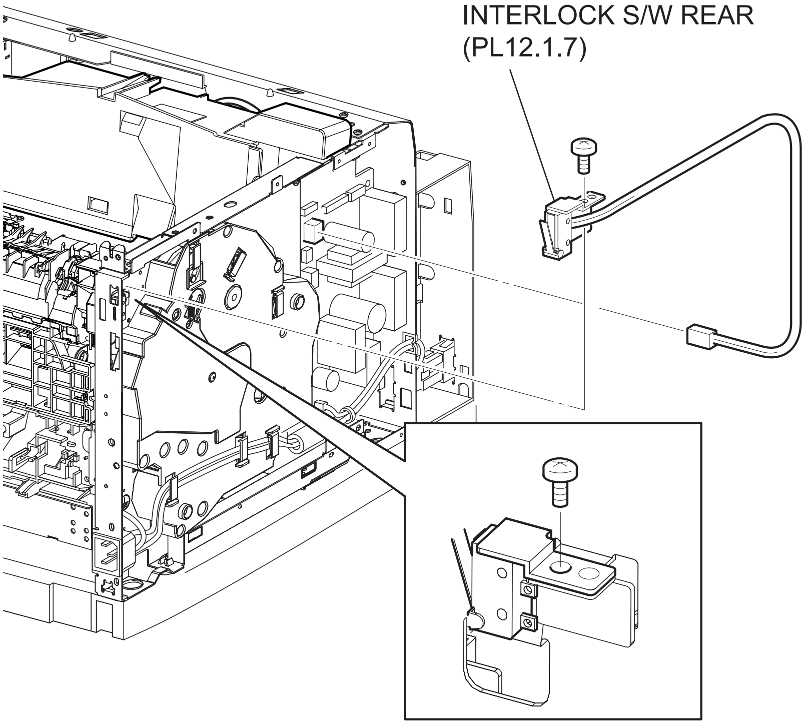
12) Install the COVER EXIT 500 (PL10.1.1)/CHUTE ASSY EXIT 250 (Reference Only). (PL9.1.14) (RRP10.1/9.7)
13) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
14) Install the COVER LEFT (PL1.1.6). (RRP1.3)
15) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

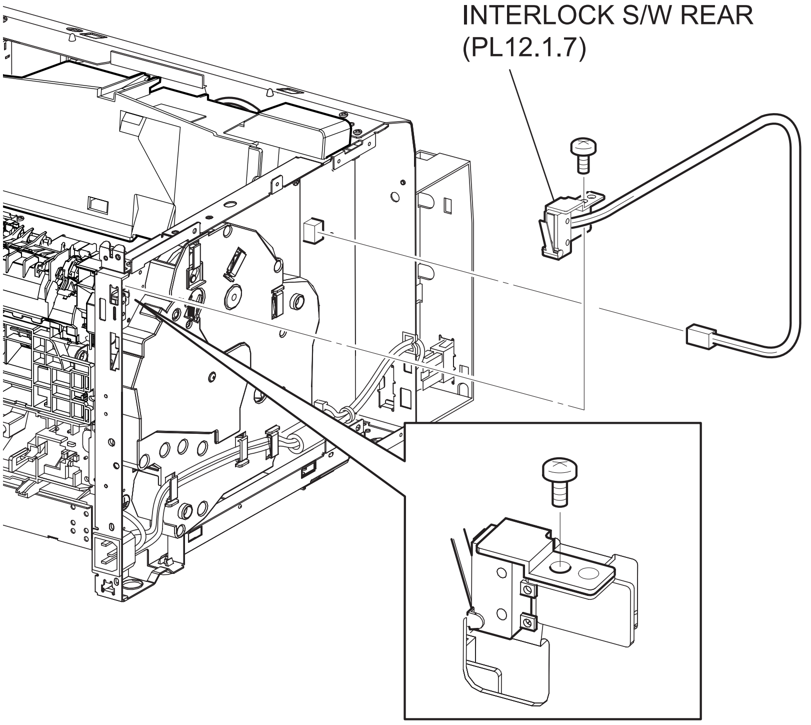
There are 2 kinds of screws, make sure they are put in the right place.

16) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)

RRP12.5 INTERLOCK S/W REAR (PL12.1.7)


INTERLOCK S/W REAR
(PL12.1.7)
JG3175AA

(34PPM


INTERLOCK S/W REAR
(PL12.1.7)

JG3094AA

(24PPM)

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Remove the COVER LEFT (PL1.1.6). (RRP1.3)
4) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
5) Remove the COVER EXIT 500 (PL10.1.1)/CHUTE ASSY EXIT 250 (Reference Only). (PL9.1.14) (RRP10.1/9.7)
6) Remove the 500 EXIT ASSY (PL10.1.2)/CHUTE LW EXT2 ASSY (PL9.1.2). (RRP10.2/9.1)
7) Remove the COVER TOP (PL1.1.7). (RRP1.4)
8) Remove the COVER FRONT (PL1.1.5). (RRP1.5)
9) Remove the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
10) Disconnect the connector (P/J44) of the INTERLOCK S/W REAR from the LVPS (PL12.1.5).
11) Release the clamps of the HARNESS ASSY INTERLOCK2 of the INTERLOCK S/W REAR from the clampers on the GEAR ASSY HOUSING (PL11.1.3).
12) Remove the screw (silver, 6mm) securing the INTERLOCK S/W REAR to the frame.
13) Remove the INTERLOCK S/W REAR.

Replacement

1) Install the INTERLOCK S/W REAR to the frame using the screw (silver, 6mm).
2) Secure the HARNESS ASSY INTERLOCK2 of the INTERLOCK S/W REAR to the clampers on the GEAR ASSY HOUSING (PL11.1.3).
3) Connect the connector (P/J44) of the INTERLOCK S/W REAR to the LVPS (PL12.1.5).
4) Install the SHIELD PLATE LVPS (PL12.1.3). (RRP12.1)
5) Install the COVER FRONT (PL1.1.5). (RRP1.5)
6) Install the COVER TOP (PL1.1.7). (RRP1.4)
7) Install the 500 EXIT ASSY (PL10.1.2)/CHUTE LW EXT2 ASSY (PL9.1.2). (RRP10.2/9.1)

NOTE **When installing, pull the CHUTE EXIT FUSER lever.**

8) Install the COVER EXIT 500 (PL10.1.1)/CHUTE ASSY EXIT 250 (Reference Only). (PL9.1.14) (RRP10.1/9.7)
9) Install the COVER RIGHT (PL1.1.4). (RRP1.2)
10) Install the COVER LEFT (PL1.1.6). (RRP1.3)
11) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE **There are 2 kinds of screws, make sure they are put in the right place.**

12) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)

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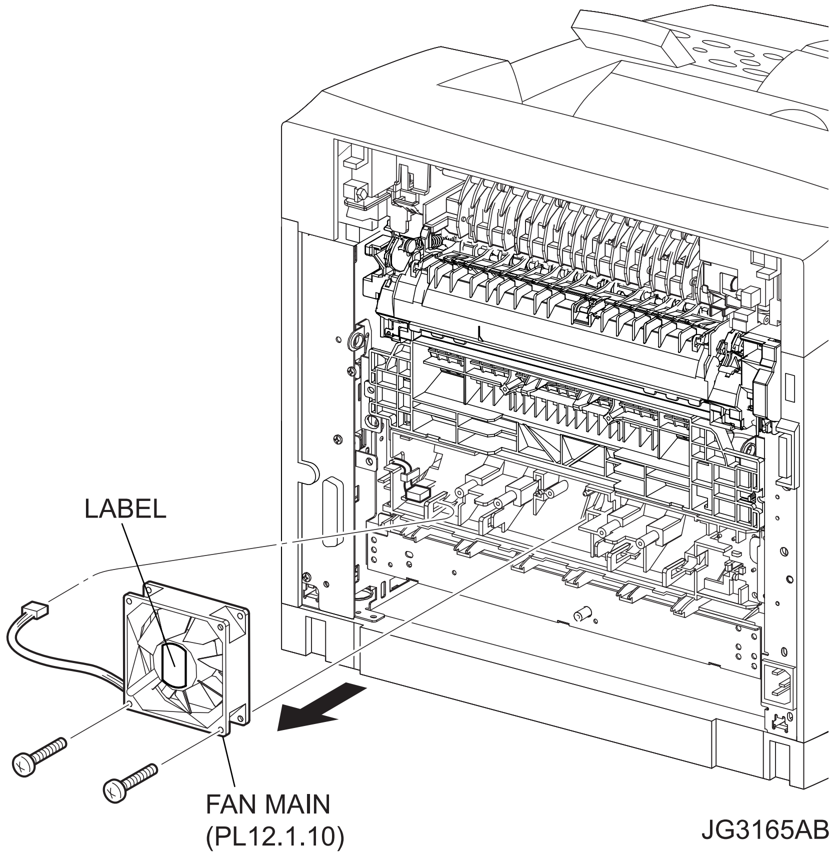
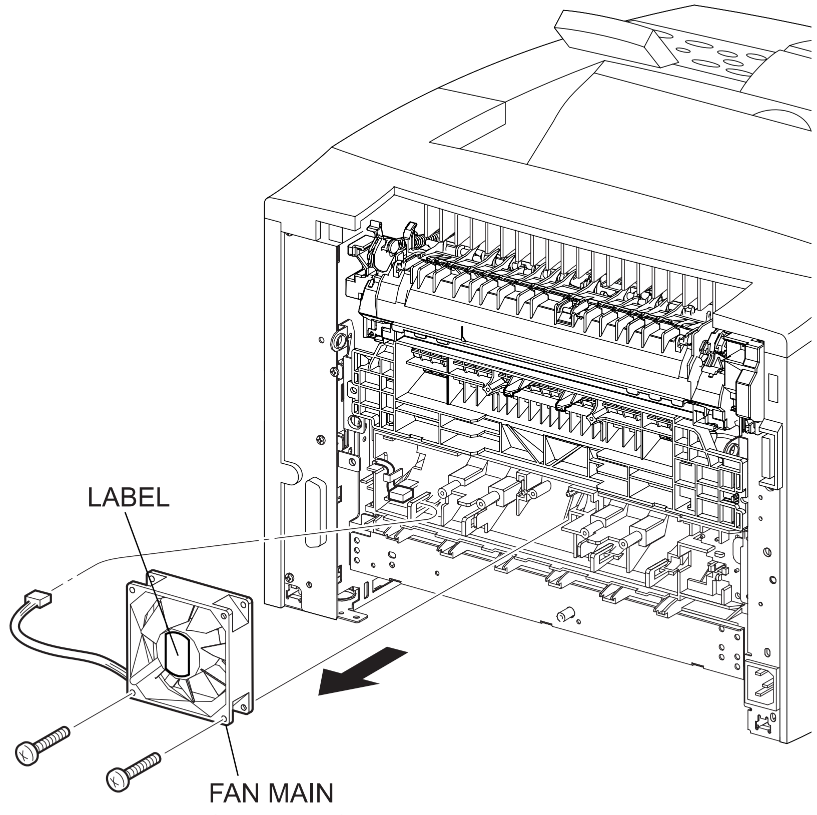
RRP12.6   FAN MAIN (PL12.1.10)


LABEL
FAN MAIN
(PL12.1.10)
JG3165AB

(34PPM)


LABEL
FAN MAIN
(PL12.1.10)
JG3095AB

(24PPM)

Removal

1) Remove the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)
2) Remove the COVER REAR (PL1.1.3). (RRP1.1)
3) Disconnect the connector (P/J244) of the FAN MAIN from the HARNESS ASSY TRAY1 (PL5.1.37).
4) Remove the 2 screws (silver tapping, 30mm) securing the FAM MAIN to the frame, and remove the FAN MAIN.

Replacement

1) Install the FAN MAIN to the frame using the 2 screws (silver tapping, 30mm) .

NOTE

When installing, be sure to install the FAN MAIN so that the label is facing outside.

NOTE

When installing, make sure the harness have not pinched between the FAN MAIN and the frame.

2) Connect the connector (P/J244) of the FAN MAIN to the HARNESS ASSY TRAY1 (PL5.1.37).
3) Install the COVER REAR (PL1.1.3). (RRP1.1)

NOTE

There are 2 kinds of screws, make sure they are put in the right place.

4) Install the COVER REAR 500/COVER REAR 250 (PL10.2.21/9.1.12). (RRP10.9/9.4)

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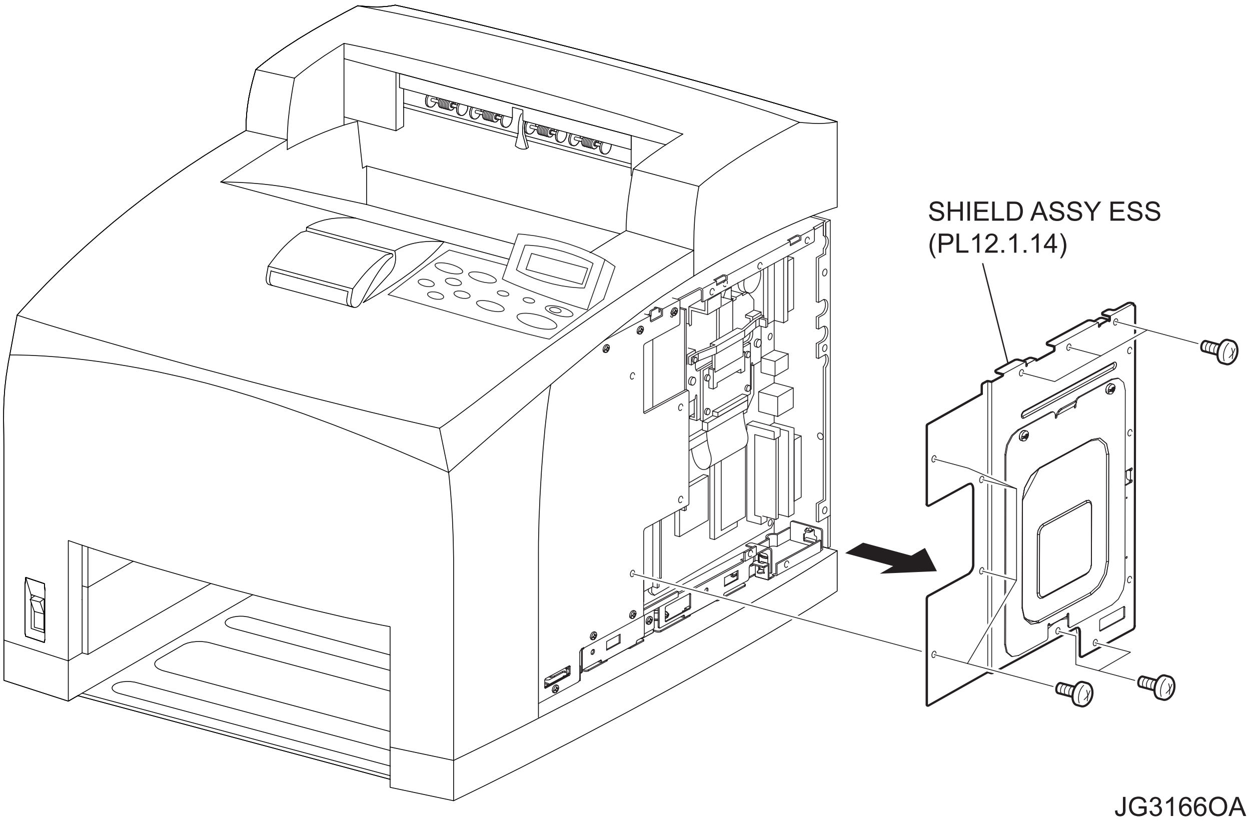
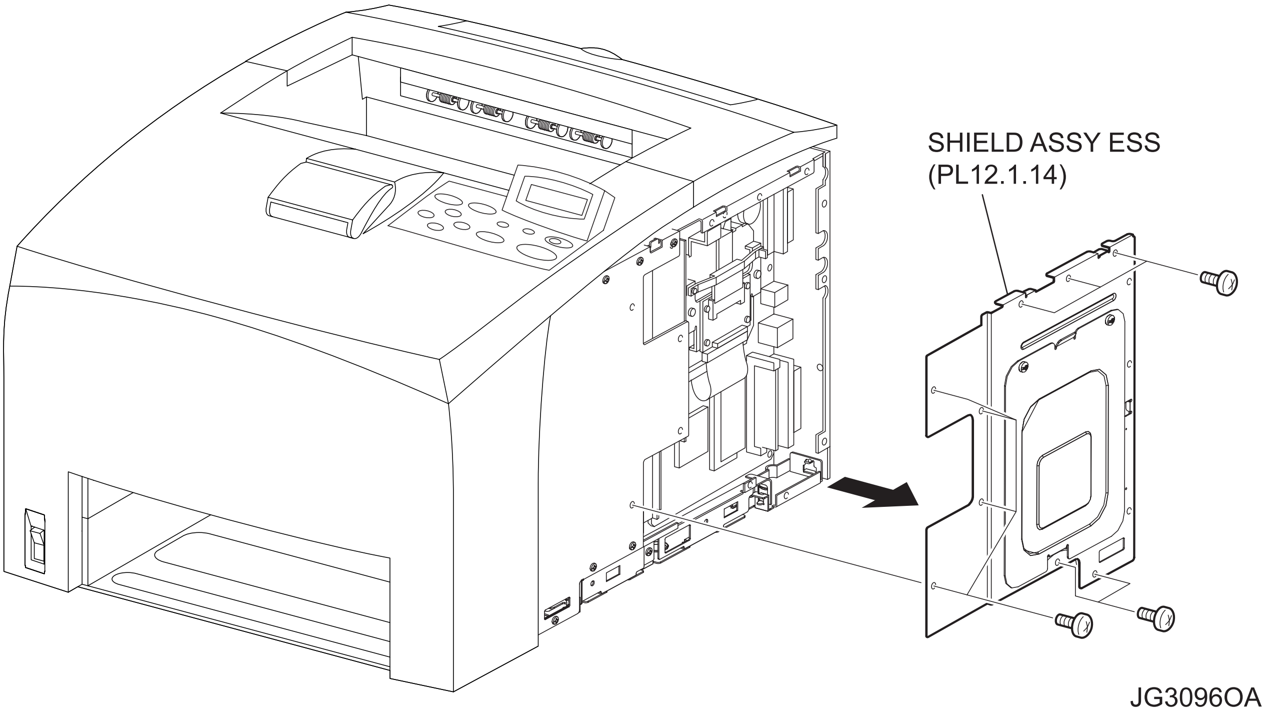
RRP12.7 SHIELD ASSY ESS (PL12.1.14)


SHIELD ASSY ESS
(PL12.1.14)
JG3166OA

(34PPM)


SHIELD ASSY ESS
(PL12.1.14)
JG3096OA

(24PPM)

Removal

1) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
2) Remove the 12 screws (silver, 6mm) securing the SHIELD ASSY ESS to the frame.
3) Remove the SHIELD ASSY ESS.

Replacement

1) Install the SHIELD ASSY ESS to the frame using the 12 screws (silver, 6mm).
2) Install the COVER RIGHT (PL1.1.4). (RRP1.2)

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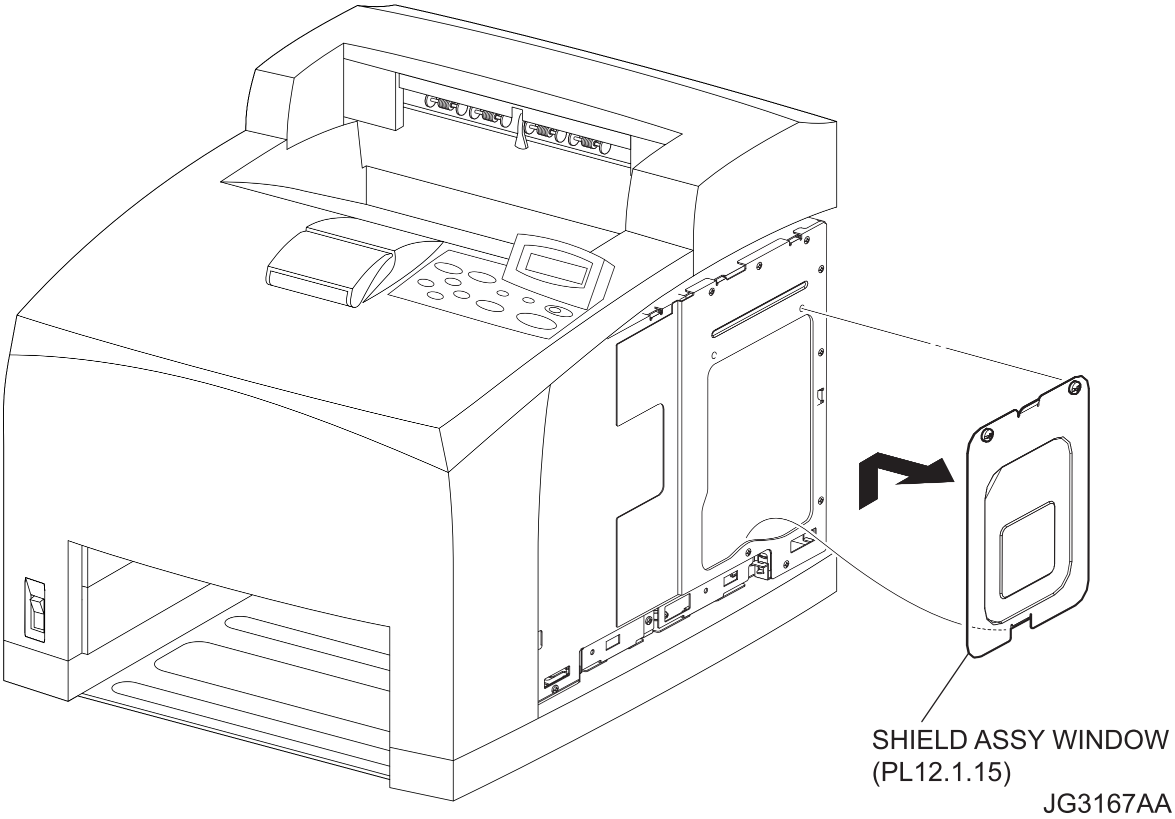
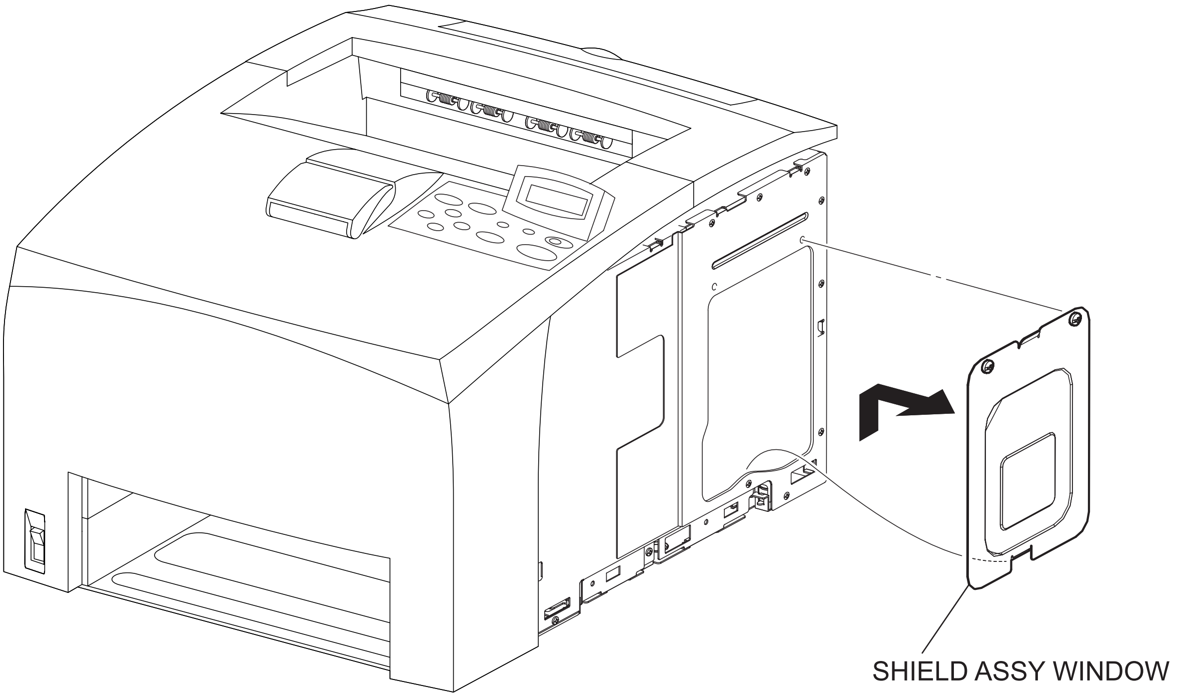
RRP12.8 SHIELD ASSY WINDOW (PL12.1.15)


SHIELD ASSY WINDOW
(PL12.1.15)
JG3167AA

(34PPM)


SHIELD ASSY WINDOW
(PL12.1.15)
JG3097AA

(24PPM)

Removal

1) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
2) Remove the 2 screws securing the SHIELD ASSY WINDOW to the frame.
3) Remove the SHIELD ASSY WINDOW.

Replacement

1) Install the SHIELD ASSY WINDOW to the frame using the 2 screws.
2) Install the COVER RIGHT (PL1.1.4). (RRP1.2)

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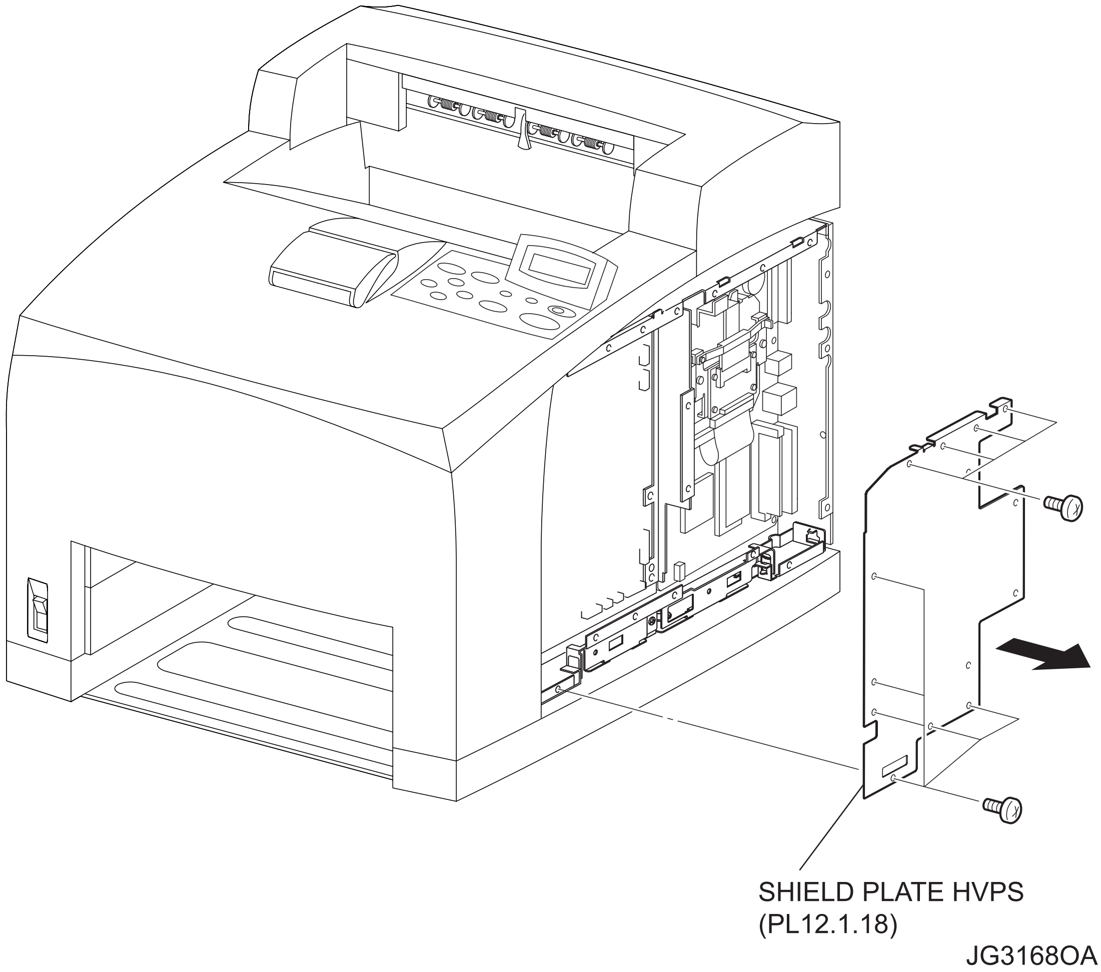
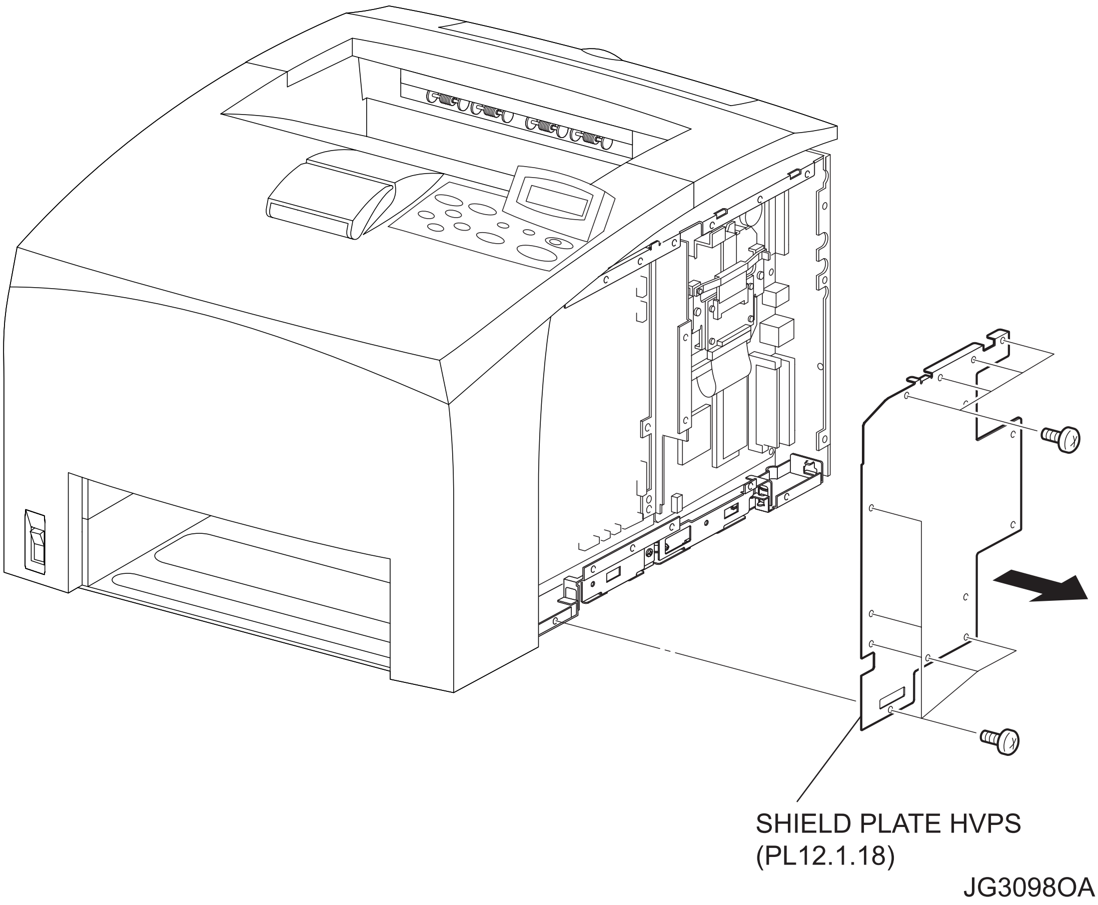
RRP12.9 SHIELD PLATE HVPS (PL12.1.18)


SHIELD PLATE HVPS
(PL12.1.18)
JG3168OA

(34PPM)


SHIELD PLATE HVPS
(PL12.1.18)
JG3098OA

(24PPM)

Removal

1) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
2) Remove the SHIELD ASSY ESS (PL12.1.14). (RRP12.7)
3) Remove the 10 screws (silver, 6mm) securing the SHIELD PLATE HVPS to the frame.
4) Remove the SHIELD PLATE HVPS.

Replacement

1) Install the SHIELD PLATE HVPS to the frame using the 10 screws (silver, 6mm).
2) Install the SHIELD ASSY ESS (PL12.1.14). (RRP12.7)
3) Install the COVER RIGHT (PL1.1.4). (RRP1.2)

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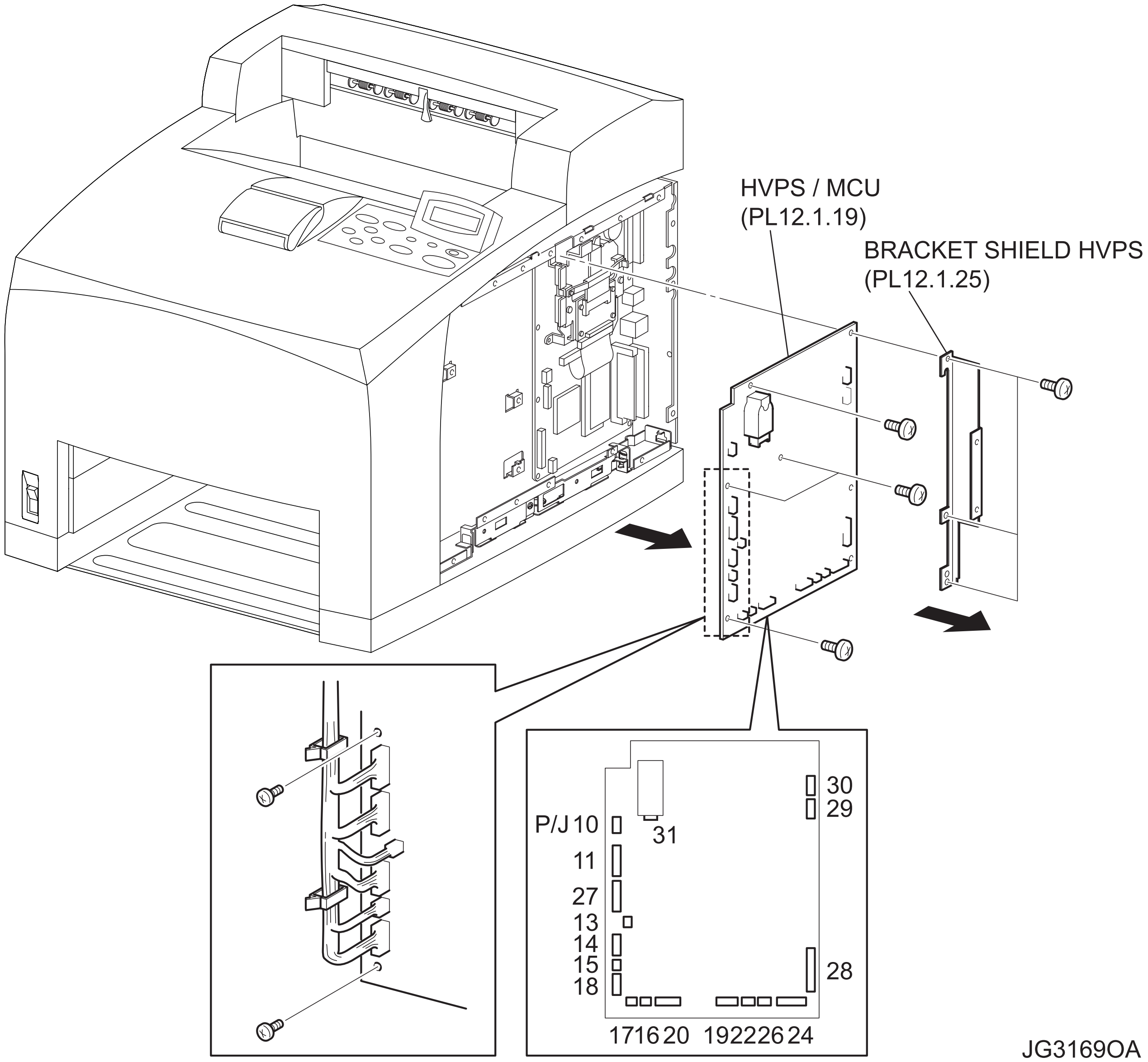
RRP12.10 HVPS/MCU (PL12.1.19)


HVPS / MCU
(PL12.1.19)
BRACKET SHIELD HVPS
(PL12.1.25)
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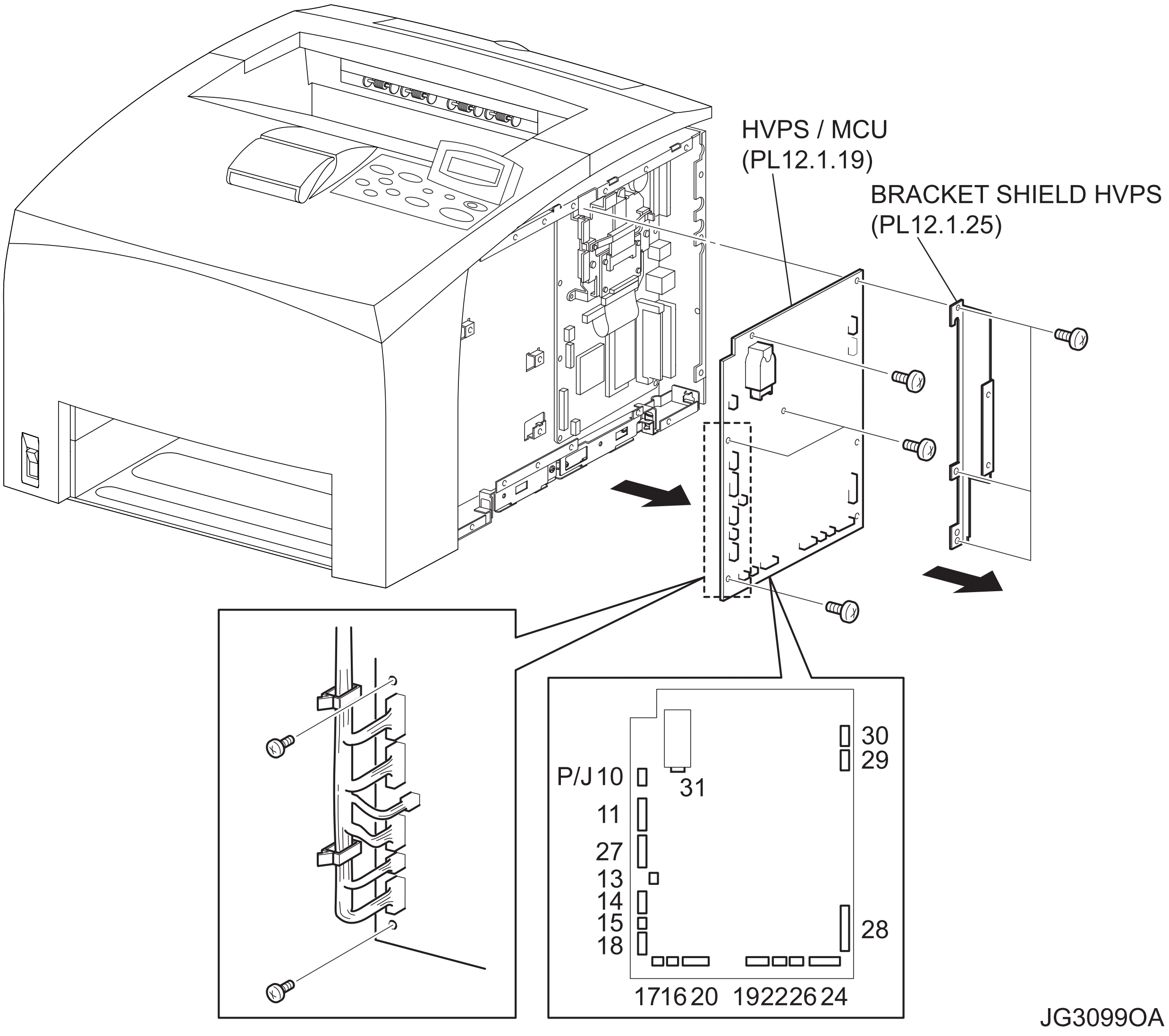
(34PPM)


HVPS / MCU
(PL12.1.19)
BRACKET SHIELD HVPS
(PL12.1.25)
P/J 10
JG3099OA

(24PPM)

Removal

1) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
2) Remove the SHIELD ASSY ESS (PL12.1.14). (RRP12.7)
3) Remove the SHIELD PLATE HVPS (PL12.1.18). (RRP12.9)
4) Remove the screw (silver, 6mm) securing the BRACKET HANDLE R (PL12.1.12) to the frame.
5) Remove the BRACKET HANDLE R from thr frame.
6) Disconnect the harness connectors from the connectors (P/J10, P/J11, P/J13, P/J14, P/J15, P/J16, P/J17, P/J18, P/J20, P/J22, P/J24, P/J26, P/J 27, P/J 28, P/J29, P/J30, and P/J31) on the HVPS/MCU.
7) Remove the 3 screws (silver, 6mm) securing the BRACKET SHIELD HVPS (PL12.1.25) to the frame.
8) Remove the BRACKET SHIELD HVPS.
9) Remove the 4 screws (silver, 6mm) securing the HVPS/MCU to the frame.
10) Remove the HVPS/MCU.

Replacement

1) Install the HVPS/MCU to the frame using the 4 screws (silver, 6mm).

NOTE **When installing the HVPS/MCU, install the board under the hook of the frame. (NOTE 1)**

NOTE **When tightening the screws, be careful not to pinch the harness between the board and frame. (NOTE 2)**

2) Connect the connectors of the harness to the connectors (P/J10, P/J11, P/J13, P/J14, P/J15, P/J16, P/J17, P/J18, P/J20, P/J22, P/J24, P/J26, P/J 27, P/J 28, P/J29, P/J30, and P/J31) on the HVPS/MCU.
3) Install the BRACKET SHIELD HVPS (PL12.1.25) to the frame using the 3 screws (silver, 6mm).
4) Install the BRACKET HANDLE R (PL12.1.12) to the frame using the screw (silver, 6mm).
5) Install the SHIELD PLATE HVPS (PL12.1.18). (RRP12.9)
6) Install the SHIELD ASSY ESS (PL12.1.14). (RRP12.7)
7) Install the COVER RIGHT (PL1.1.4). (RRP1.2)

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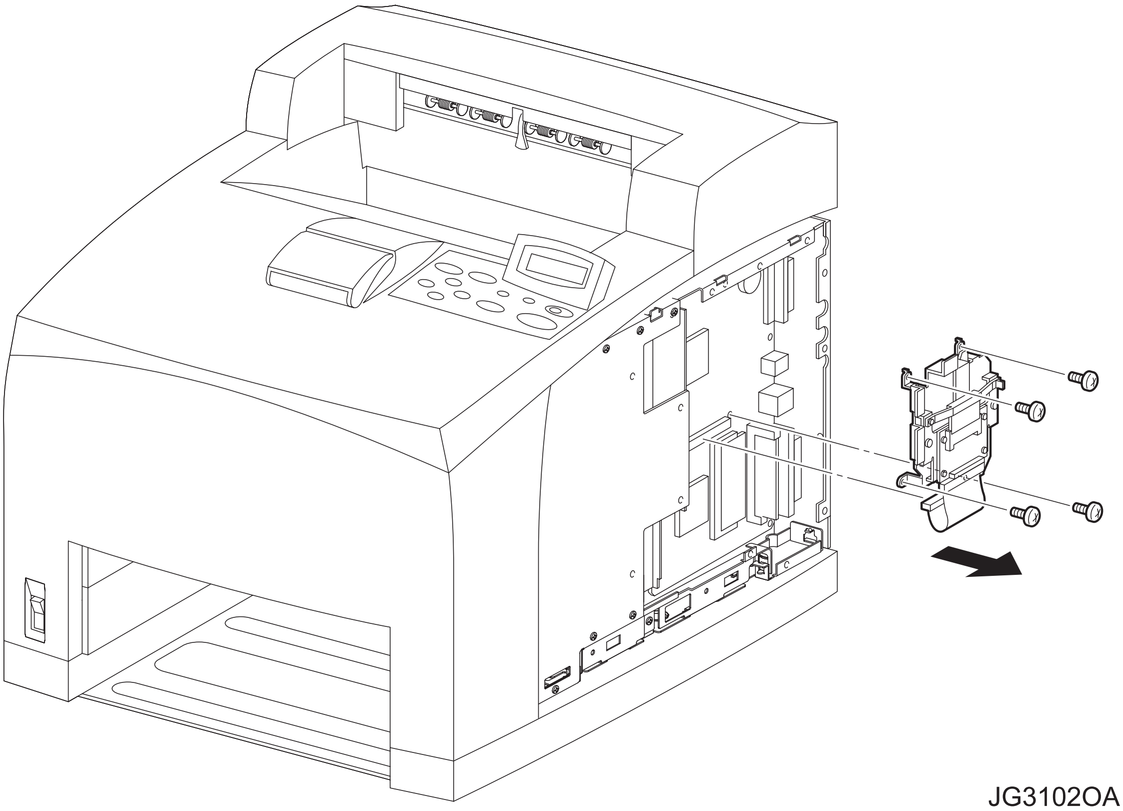
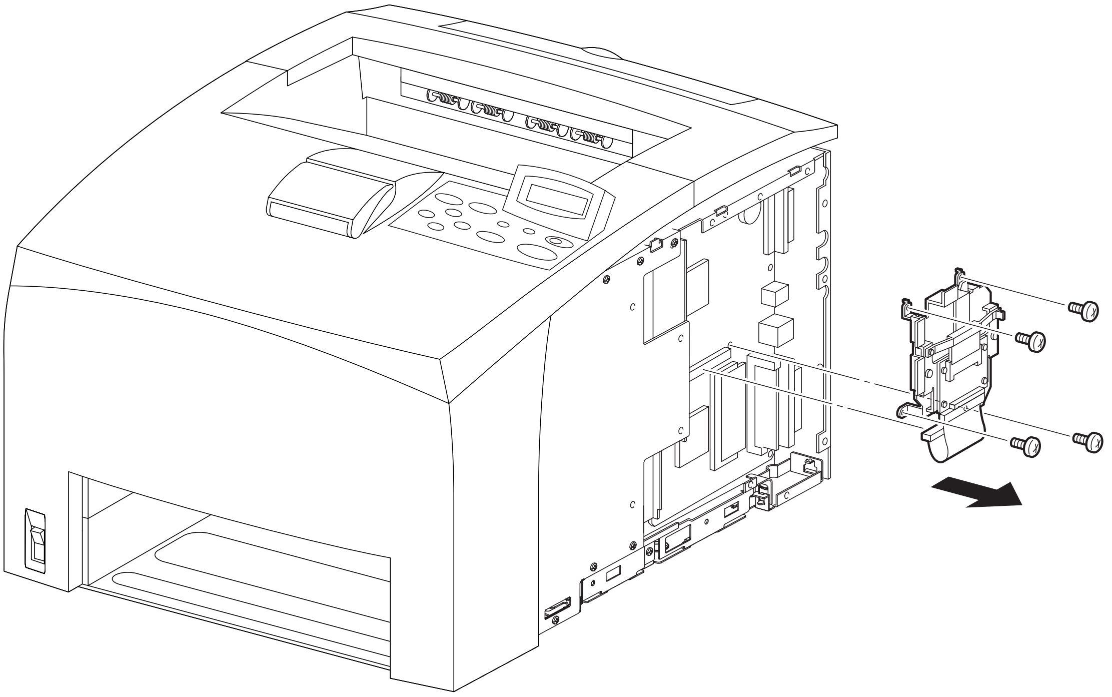
RRP12.11 BLACKET-PWBA HDD(PL12.1.32)



(34PPM)



(24PPM)

Removal

1) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
2) Remove the SHIELD ASSY WINDOW (PL12.1.15). (RRP12.8)
3) Remove the SHIELD ASSY ESS (PL12.1.14). (RRP12.7)
4) Disconnect the harness connector from the connector (P/J310) of the PWBA ESS (PL12.1.13).
5) Remove the 4 screws (silver, 6mm) securing the BRACKET-PWBA HDD (PL12.1.32) to the frame.
6) Remove the BRACKET-PWBA HDD (PL12.1.32).

Replacement

1) Install the BRACKET-PWBA HDD (PL12.1.32) to the frame using the 4 screws (silver, 6mm).
2) Connect the connector of the harness to the connector (P/J310) of the PWBA ESS (PL12.1.13).
3) Install the SHIELD ASSY ESS (PL12.1.14). (RRP12.7)
4) Install the SHIELD ASSY WINDOW (PL12.1.5). (RRP12.8)
5) Install the COVER RIGHT (PL1.1.4). (RRP1.2)

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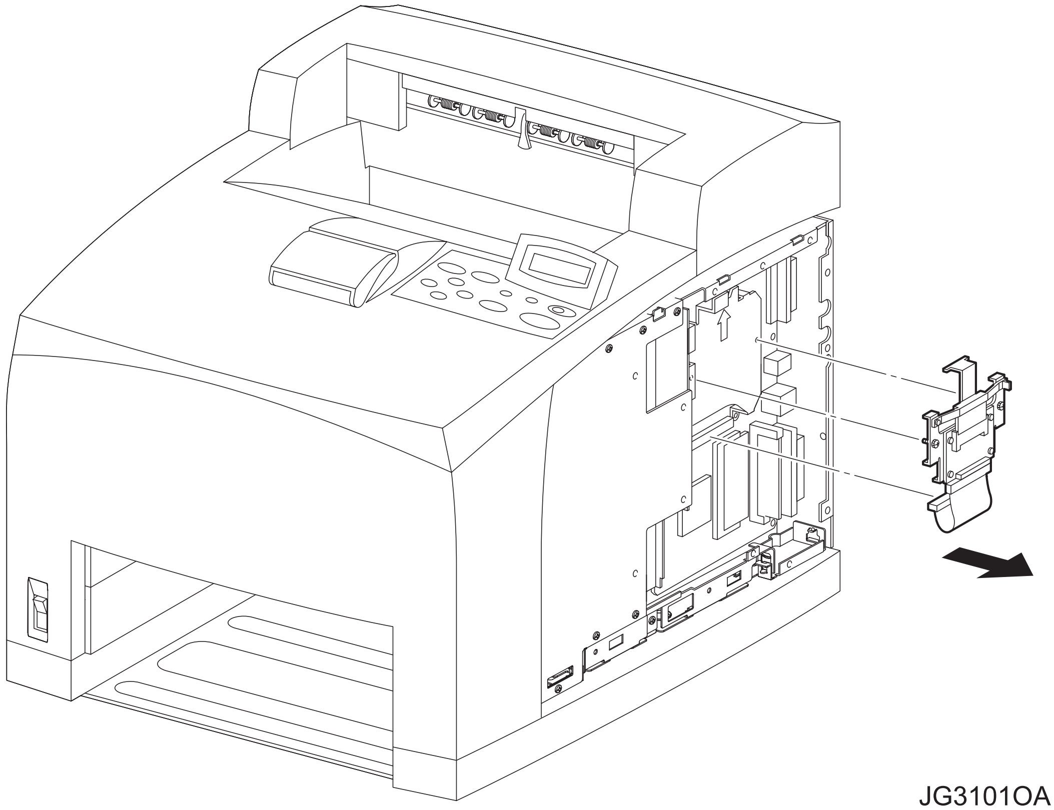
RRP12.12 BRACKET ASSY-FLASH(PL12.1.33)



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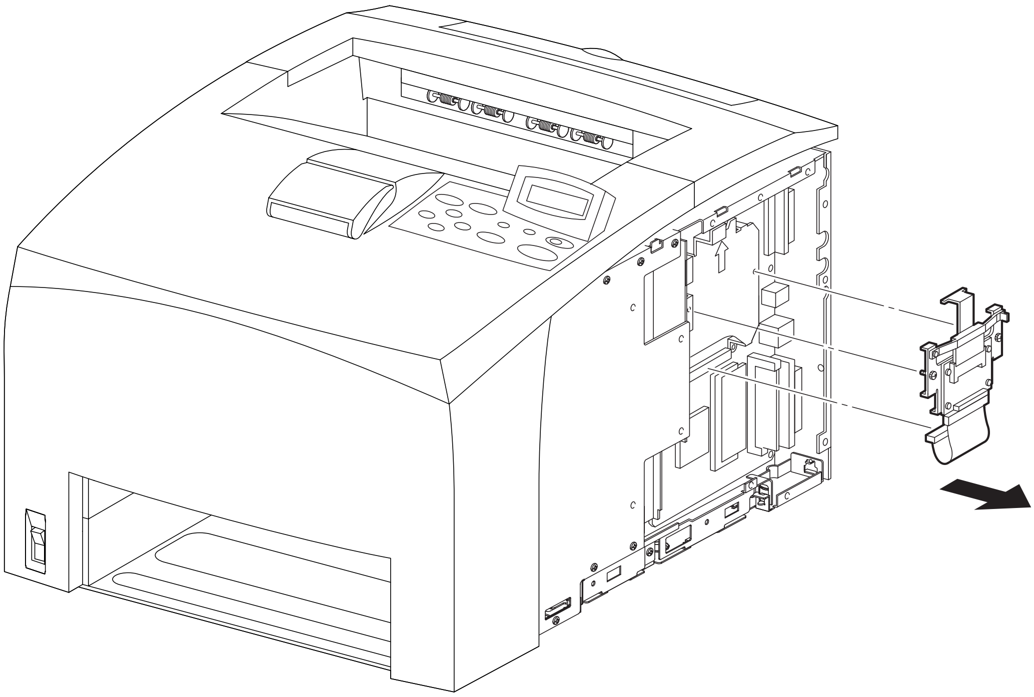

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(24PPM)

Removal

1) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
2) Remove the SHIELD ASSY ESS (PL12.1.14). (RRP12.8)
3) Remove the SHIELD ASSY WINDOW (PL12.1.15). (RRP12.7)
4) Disconnect the harness connector from the connector (P/J310) of the PWBA ESS (PL12.1.13).
5) Remove the 2 screws securing the BRACKET ASSY-FLASH (PL12.1.33) to the frame.
6) Remove the BRACKET ASSY-FLASH (PL12.1.33).

Replacement

1) Install the BRACKET ASSY-FLASH (PL12.1.33) to the frame using the 2 screws.
2) Connect the connector of the harness to the connector (P/J310) of the PWBA ESS (PL12.1.13).
3) Install the SHIELD ASSY WINDOW (PL12.1.15). (RRP12.7)
4) Install the SHIELD ASSY ESS (12.1.14). (RRP12.8)
5) Install the COVER RIGHT (PL1.1.4). (RRP1.2)

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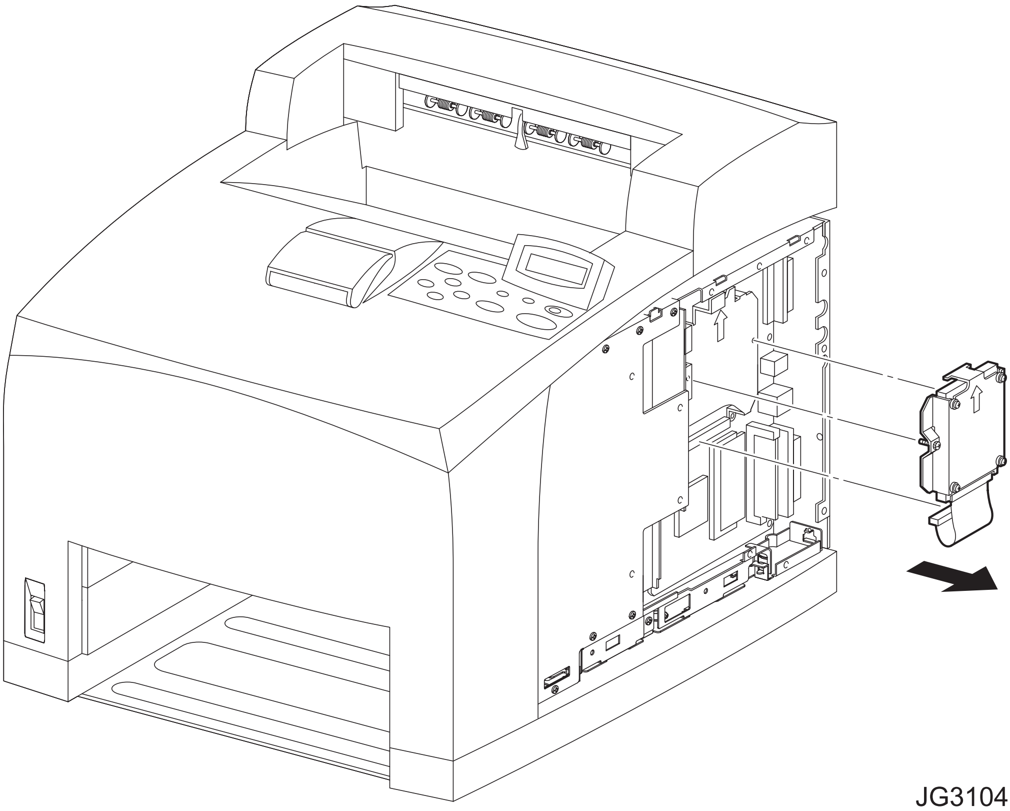
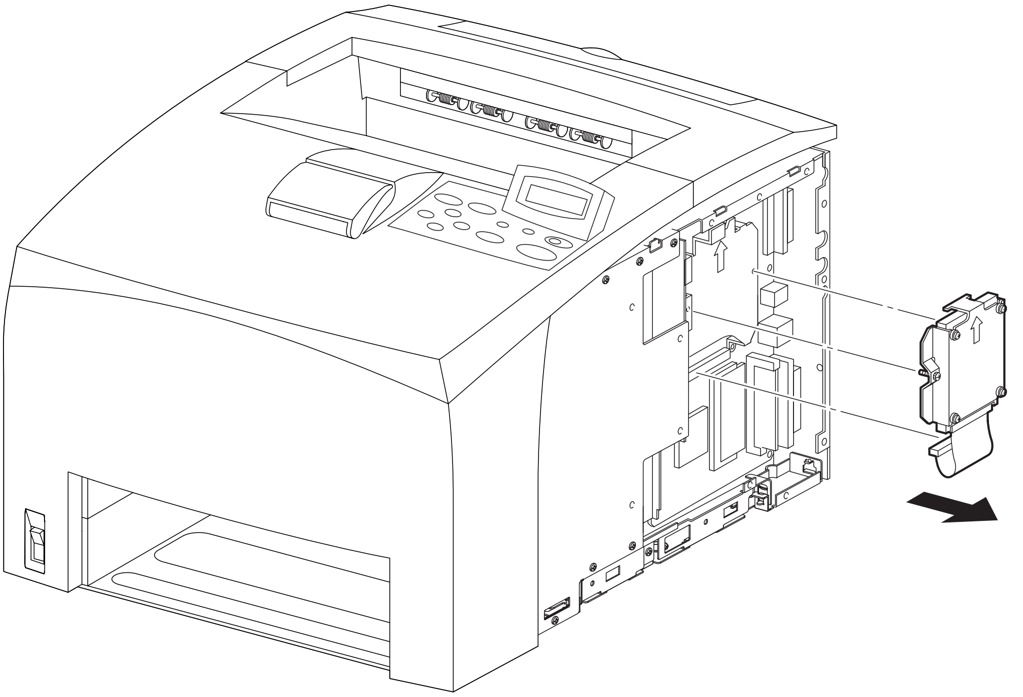
RRP12.13 HDD ASSY(OPTION)(PL12.1.43)



(34PPM)



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(24PPM)

Removal

1) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
2) Remove the SHIELD ASSY ESS (PL12.1.14). (RRP12.8)
3) Remove the SHIELD ASSY WINDOW (PL12.1.15). (RRP12.7)
4) Disconnect the harness connector from the connector (P/J310) of the PWBA ESS (PL12.1.13).
5) Remove the 2 screws securing the HDD ASSY(OPTION) (12.1.43) to the frame.
6) Remove the HDD ASSY(OPTION) (PL12.1.43).

Replacement

1) Install the HDD ASSY(OPTION) (PL12.1.43) to the frame using the 2 screws.
2) Connect the connector of the harness to the connector (P/J310) of the PWBA ESS (PL12.1.13).
3) Install the SHIELD ASSY WINDOW (PL12.1.15). (RRP12.7)
4) Install the SHIELD ASSY ESS (PL12.1.14). (RRP12.8)
5) Install the COVER RIGHT (PL1.1.4). (RRP1.2)

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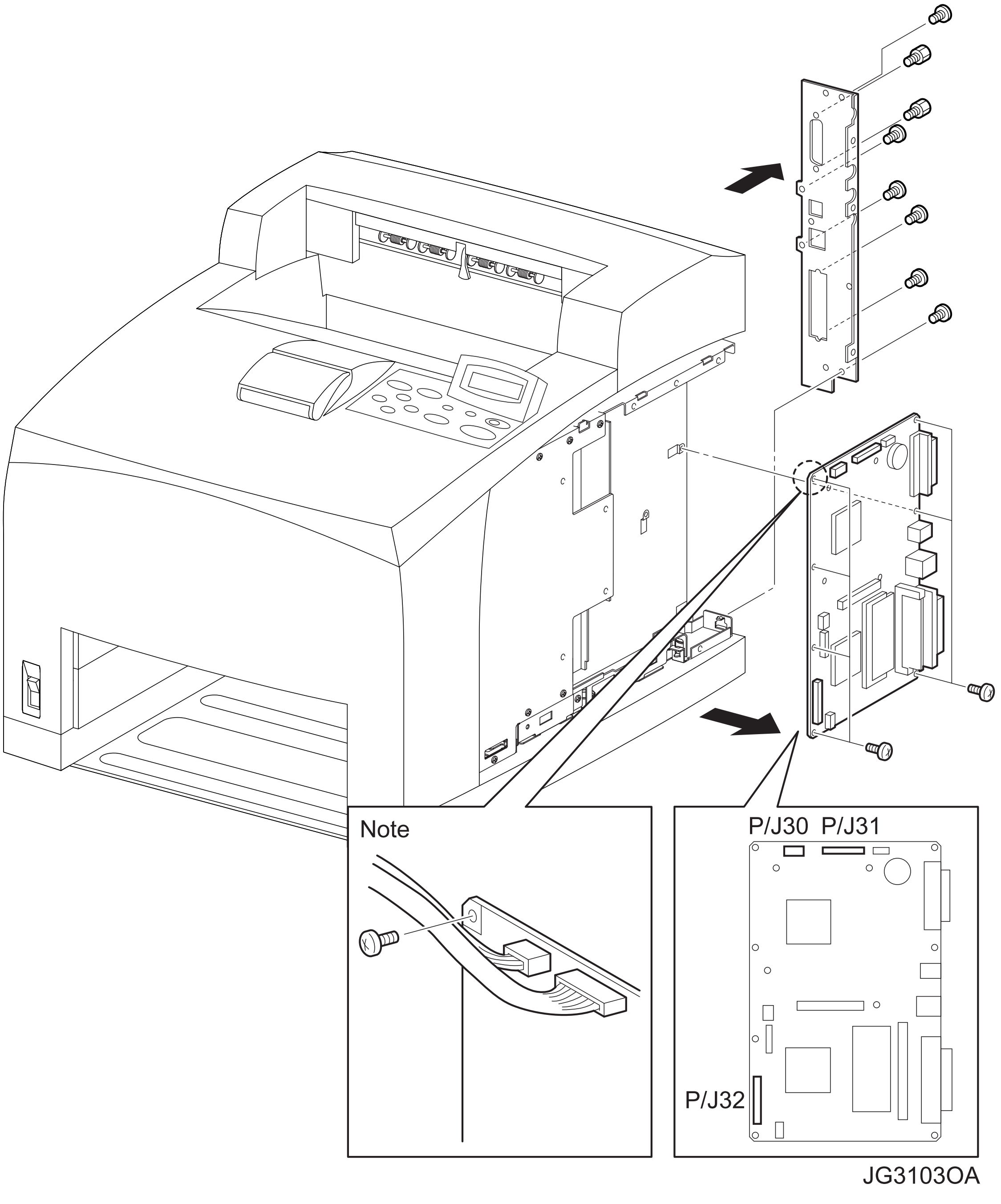
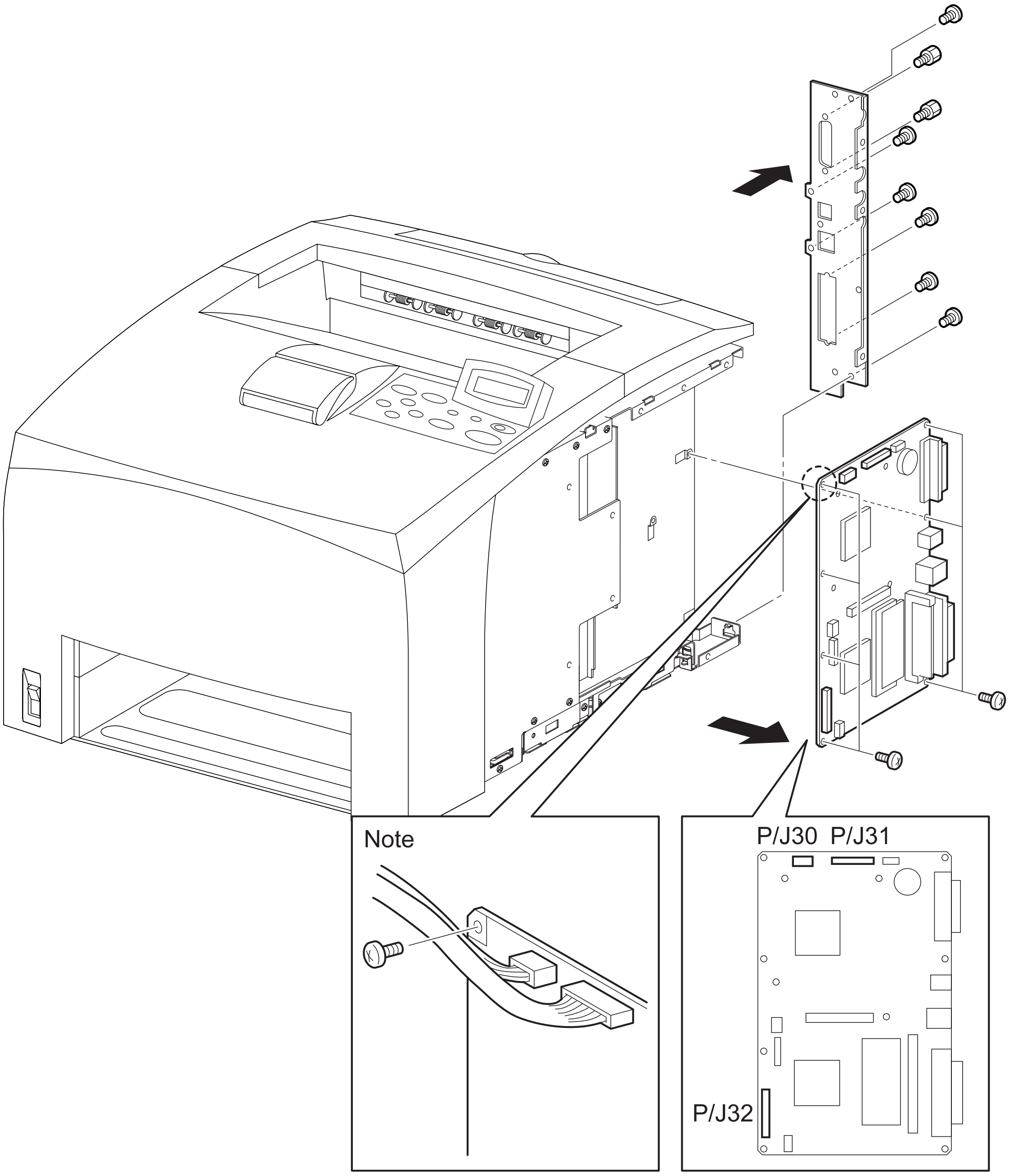
RRP12.14 PWBA ESS(PL12.1.13)


Note
P/J30
P/J31
P/J32
JG3103OA

(34PPM)


Note
P/J30
P/J31
P/J32
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(24PPM)

Removal

1) Remove the COVER RIGHT (PL1.1.4). (RRP1.2)
2) Remove the SHIELD ASSY ESS (PL12.1.14). (RRP12.8)
3) Remove the SHIELD ASSY WINDOW (PL12.1.15). (RRP12.7)
4) Remove the BRACKET-PWBA HDD (PL12.1.32). (RRP12.11)
5) Remove the screw securing the PANEL REAR (PL12.1.11) to the frame.
6) Remove the PANEL REAR (PL12.1.11).
7) Disconnect the harness connectors from the connectors (P/J30, P/J31, P/J32) of the PWBA ESS (PL12.1.13).
8) Remove the 7 screws (silver, 6mm) securing the PWBA ESS (PL12.1.13) to the frame.
9) Remove the PWBA ESS (PL12.1.13).

Replacement

1) Install the PWBA ESS (PL12.1.13) to the frame using the 7 screws (silver, 6mm).

NOTE **When tightening the screws, be careful not to pinch the harness between the board and frame.**

2) Connect the connectors of the harness to the connectors (P/J30, P/L31, P/L32) of the PWBA ESS (PL12.1.13).
3) Install the PANEL REAR (PL12.1.11) to the frame using the screw.
4) Install the BRACKET-PWBA HDD (PL12.1.32). (RRP12.11)
5) Install the SHIELD ASSY WINDOW (PL12.1.15). (RRP12.7)
6) Install the SHIELD ASSY ESS (PL12.1.14). (RRP12.8)
7) Install the COVER RIGHT (PL1.1.4). (RRP1.2)

Chapter 4 Plug/Jack(P/J) Connector Locations CONTENTS

1. Connector [P (plug) / J (jack)] (34PPM)..4 - 1
    1.1 List of P/J (34PPM).. 4 - 1
    1.2 P/J layout diagram (34PPM).. 4 - 3
2. Connector [P (plug) / J (jack)] (24PPM)..4 - 5
    2.1 List of P/J (24PPM).. 4 - 5
    2.2 P/J layout diagram (24PPM).. 4 - 7

1. Connector [P (plug) / J (jack)] (34PPM)

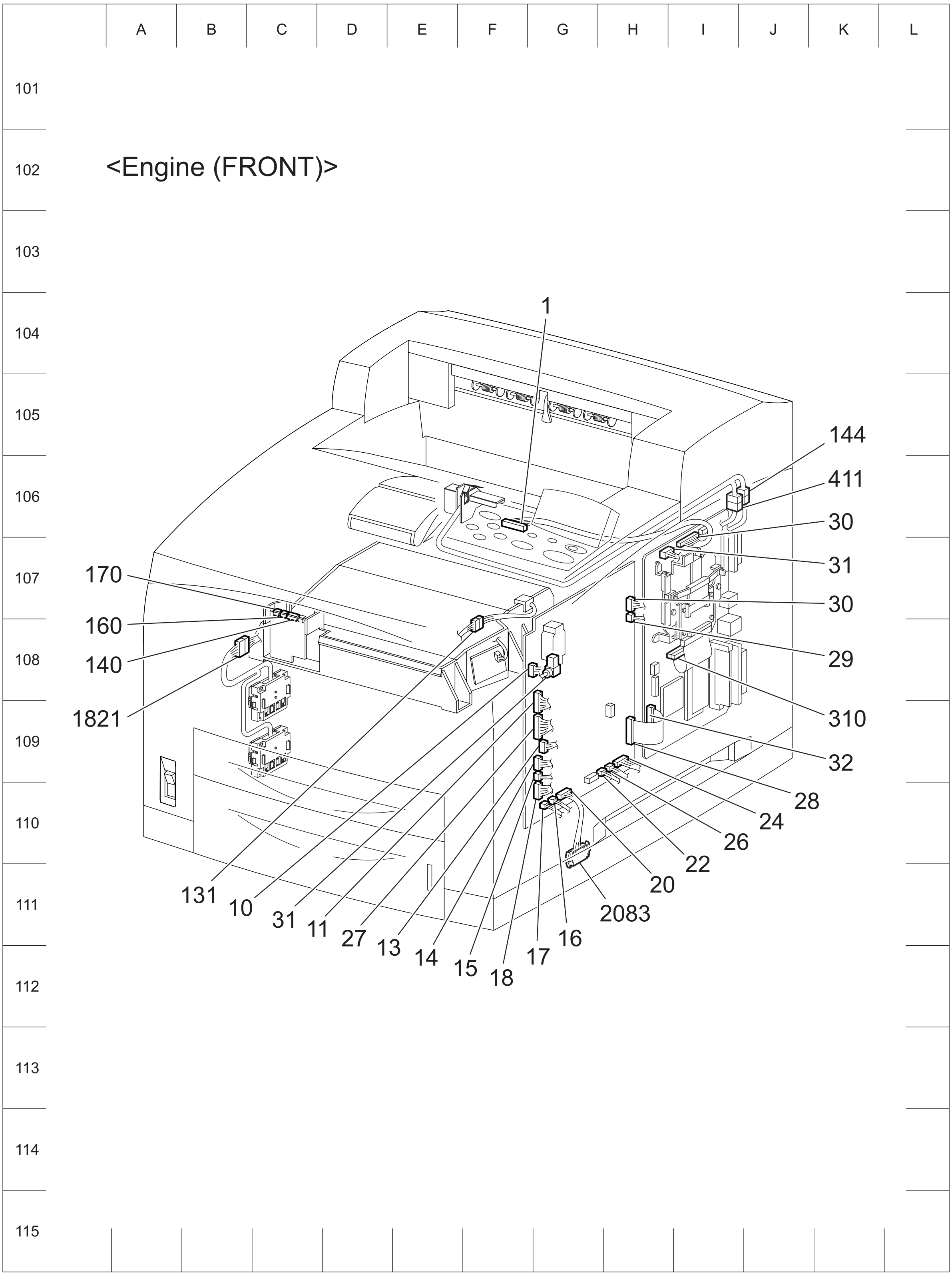
1.1 List of P/J (34PPM)

P/J	Coordiates	Remarks
1	G-104	Connects OPERATION PANEL and HARNESS ASSY PANEL
10	B-111	Connects HARNESS ASSY LVPS and HVPS/MCU
11	D-111	Connects HARNESS ASSY LVPS and HVPS/MCU
13	E-111	Connects HARNESS ASSY ROS and HVPS/MCU
14	E-112	Connects HARNESS ASSY ROS and HVPS/MCU
15	F-112	Connects HARNESS ASSY ANT and HVPS/MCU
16	G-111	Connects HARNESS ASSY ROS and HVPS/MCU
17	G-111	Connects HARNESS ASSY ROS and HVPS/MCU
18	F-112	Connects HARNESS ASSY LVPS and HVPS/MCU
20	H-111	Connects HARNESS ASSY FDR1 and HVPS/MCU
22	I-110	Connects HARNESS ASSY TONER1 and HVPS/MCU
24	J-110	Connects HARNESS ASSY CHUTE and HVPS/MCU
26	I-110	Connects HARNESS ASSY LOW PAPER SNR and HVPS/MCU
27	D-111	Connects HARNESS ASSY LVPS and HVPS/MCU
28	K-110	Connects FFC ASSY ESS and HVPS/MCU
29 *1	K-108	Connects HARNESS ASSY EXIT SNR1 and HVPS/MCU
30 *1	K-107	Connects HARNESS ASSY OCT1 and HVPS/MCU
30	K-106	Connects HARNESS ASSY PANEL and ESS
31	C-111	Connects GUIDE ASSY CRU and HVPS/MCU
31	K-107	Connects HARNESS ASSY LVPS and PWBA ESS
32	K-109	Connects FFC ASSY ESS and PWBA ESS
40	X-120	Connects HARNESS ASSY LVPS and LVPS
41	X-121	Connects HARNESS ASSY LVPS and LVPS
42	W-120	Connects HARNESS ASSY LVPS and LVPS
43	X-122	Connects MAIN MOTOR and LVPS
44	X-122	Connects INTERLOCK SW REAR and LVPS
45	X-123	Connects INTERLOCK SW 24V and LVPS
46	X-124	Connects HARNESS ASSY FUSER and LVPS
47	U-126	Connects HARNESS ASSY FUSER and LVPS
48	U-125	Connects HARNESS ASSY 100V and LVPS
101	V-120	Connects LVPS and PWBA EXIT MOTOR
102	U-120	Connects HARNESS ASSY LVPS and PWBA EXIT MOTOR
103	S-119	Connects MOTOR ASSY EXIT and PWBA EXIT MOTOR
131	B-111	Connects ROS ASSY and HARNESS ASSY ROS
140	A-108	Connects ROS ASSY and HARNESS ASSY ROS
141	U-120	Connects HARNESS ASSY ROS and HARNESS ASSY LVPS
142	R-119	Connects HARNESS ASSY LVPS and INTERLOCK SW 5V
144	K-105	Connects INTERLOCK SW and HARNESS ASSY LVPS
150	M-121	Connects PWBA ASSY ANT and HARNESS ASSY ANT
160	A-108	Connects ROS ASSY and HARNESS ASSY ROS
170	A-107	Connects ROS ASSY and HARNESS ASSY ROS
220	R-127	Connects SENSOR TONER and HARNESS ASSY TONER1
221	M-124	Connects HARNESS ASSY TONER1 and HARNESS ASSY TONER2
240	M-122	Connects SENSOR NO PAPER and HARNESS ASSY TRAY1
241	O-126	Connects SENSOR REGI and HARNESS ASSY TRAY1
242	Q-126	Connects CLUTCH ASSY PH and HARNESS ASSY TRAY1

P/J	Coordiates	Remarks
243	P-126	Connects CLUTCH REGI and HARNESS ASSY TRAY1
244	M-124	Connects FAN MAIN and HARNESS ASSY TRAY1
245	M-125	Connects HARNESS ASSY TRAY1 and HARNESS ASSY CHUTE
246	M-123	Connects SENSOR NO PAPER and HARNESS ASSY TRAY2
247	Q-126	Connects CLUTCH ASSY PH and HARNESS ASSY TRAY2
248	M-126	Connects HARNESS ASSY TRAY2 andHARNESS ASSY CHUTE
260	N-126	Connects SENSOR LOW PAPER and HARNESS ASSY LOW PAPER SNR
270	T-119	Connects FAN SUB and HARNESS ASSY LVPS
290 *1	M-120	Connects SENSOR FULL STACK and HARNESS ASSY EXIT SNR1
291 *1	M-120	Connects SENSOR FACE UP OPEN and HARNESS ASSY EXIT SNR1
310	M-122	Connects EP CARTRIGE and GUIDE ASSY CRU
310	K-109	Connects HARNESS ASSY IDE and PWBA-CF CARD Option:Connects HDD Cable and HDD
411	K-106	Connects COVER OPEN SW and HARNESS ASYY LVPS
480	W-125	Connects HARNESS ASSY 100V and POWER SWITCH
1821	A-109	Connects GUIDE TRAY L ASSY and HARNESS ASSY LVPS
2083	H-111	Connects HARNESS ASSY FDR1 and HARNESS ASSYFDR2
2750	S-126	Connects HARNESS ASSY LVPS and HARNESS ASSY DUP
3070 *1	M-121	Connects HARNESS ASSY OCT1 and HARNESS ASSY OCT2
4647	T-126	Connects HARNESS ASSY FUSER and FUSER ASSY

*1:500 PAPER EXIT Only.

1.2 P/J layout diagram (34PPM)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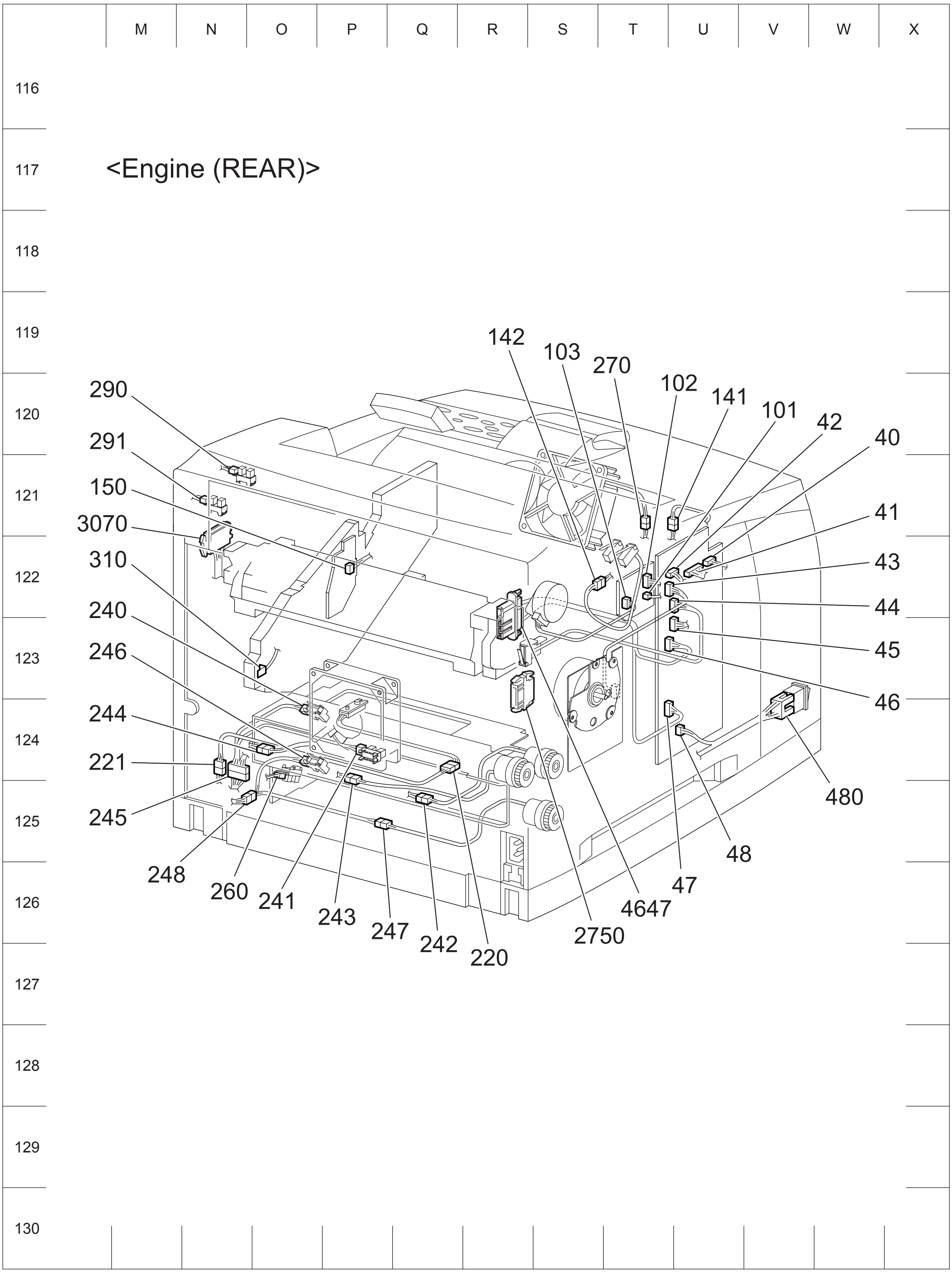
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2. Connector [P (plug) / J (jack)] (24PPM)

2.1 List of P/J (24PPM)

P/J	Coordiates	Remarks
1	G-104	Connects OPERATION PANEL and HARNESS ASSY PANEL
10	A-111	Connects HARNESS ASSY LVPS and HVPS/MCU
11	D-111	Connects HARNESS ASSY LVPS and HVPS/MCU
13	E-111	Connects HARNESS ASSY ROS and HVPS/MCU
14	E-112	Connects HARNESS ASSY ROS and HVPS/MCU
15	F-112	Connects HARNESS ASSY ANT and HVPS/MCU
16	G-111	Connects HARNESS ASSY ROS and HVPS/MCU
17	G-111	Connects HARNESS ASSY ROS and HVPS/MCU
18	F-112	Connects HARNESS ASSY LVPS and HVPS/MCU
20	H-111	Connects HARNESS ASSY FDR1 and HVPS/MCU
22	I-110	Connects HARNESS ASSY TONER1 and HVPS/MCU
24	J-110	Connects HARNESS ASSY CHUTE and HVPS/MCU
26	I-110	Connects HARNESS ASSY LOW PAPER SNR and HVPS/MCU
27	D-111	Connects HARNESS ASSY LVPS and HVPS/MCU
28	K-110	Connects FFC ASSY ESS and HVPS/MCU
29 *1	K-108	Connects HARNESS ASSY EXIT SNR1 and HVPS/MCU
30 *1	K-107	Connects HARNESS ASSY OCT1 and HVPS/MCU
30	K-106	Connects HARNESS ASSY PANEL and ESS
31	C-111	Connects GUIDE ASSY CRU and HVPS/MCU
31	K-107	Connects HARNESS ASSY LVPS and PWBA ESS
32	K-109	Connects FFC ASSY ESS and PWBA ESS
40	X-122	Connects HARNESS ASSY LVPS and LVPS
41	X-123	Connects HARNESS ASSY LVPS and LVPS
42	W-122	Connects HARNESS ASSY LVPS and LVPS
43	X-123	Connects MAIN MOTOR and LVPS
44	X-124	Connects INTERLOCK SW REAR and LVPS
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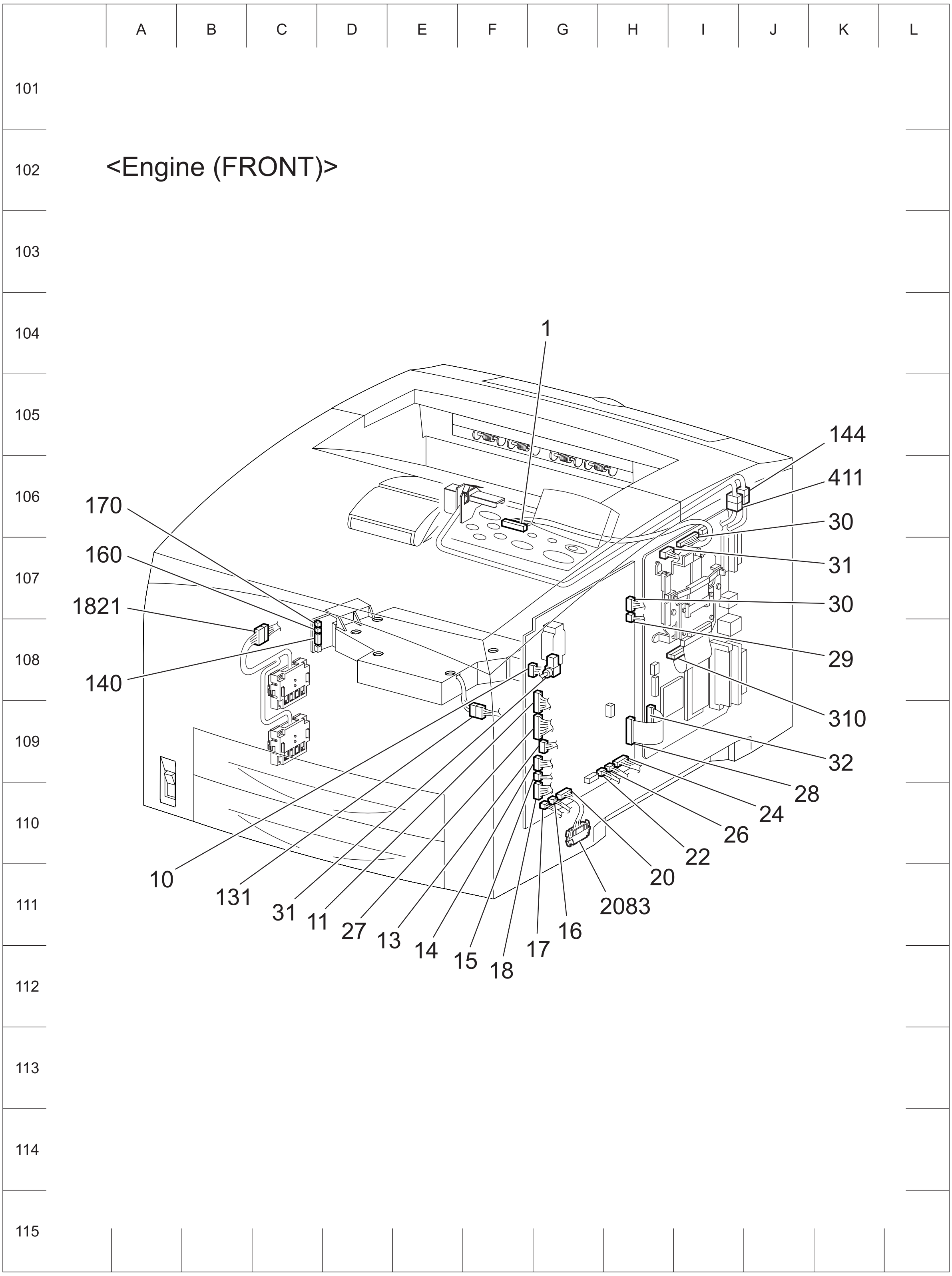
47	U-127	Connects HARNESS ASSY FUSER and LVPS
48	V-127	Connects HARNESS ASSY 100V and LVPS
101	V-121	Connects LVPS and PWBA EXIT MOTOR
102	U-121	Connects HARNESS ASSY LVPS and PWBA EXIT MOTOR
103	S-121	Connects MOTOR ASSY EXIT and PWBA EXIT MOTOR
131	B-111	Connects ROS ASSY and HARNESS ASSY ROS
140	A-108	Connects ROS ASSY and HARNESS ASSY ROS
141	U-121	Connects HARNESS ASSY ROS and HARNESS ASSY LVPS
142	R-120	Connects HARNESS ASSY LVPS and INTERLOCK SW 5V
144	K-105	Connects INTERLOCK SW and HARNESS ASSY LVPS
150	M-123	Connects PWBA ASSY ANT and HARNESS ASSY ANT
160	A-107	Connects ROS ASSY and HARNESS ASSY ROS
170	A-106	Connects ROS ASSY and HARNESS ASSY ROS
220	R-128	Connects SENSOR TONER and HARNESS ASSY TONER1
221	M-126	Connects HARNESS ASSY TONER1 and HARNESS ASSY TONER2
240	M-124	Connects SENSOR NO PAPER and HARNESS ASSY TRAY1
241	O-127	Connects SENSOR REGI and HARNESS ASSY TRAY1
242	Q-128	Connects CLUTCH ASSY PH and HARNESS ASSY TRAY1

P/J	Coordiates	Remarks
243	P-127	Connects CLUTCH REGI and HARNESS ASSY TRAY1
244	M-125	Connects FAN MAIN and HARNESS ASSY TRAY1
245	M-126	Connects HARNESS ASSY TRAY1 and HARNESS ASSY CHUTE
246	M-124	Connects SENSOR NO PAPER and HARNESS ASSY TRAY2
247	Q-128	Connects CLUTCH ASSY PH and HARNESS ASSY TRAY2
248	M-127	Connects HARNESS ASSY TRAY2 andHARNESS ASSY CHUTE
260	N-127	Connects SENSOR LOW PAPER and HARNESS ASSY LOW PAPER SNR
270	T-121	Connects FAN SUB and HARNESS ASSY LVPS
290 *1	M-118	Connects SENSOR FULL STACK and HARNESS ASSY EXIT SNR1
291 *1	M-119	Connects SENSOR FACE UP OPEN and HARNESS ASSY EXIT SNR1
310	M-123	Connects EP CARTRIGE and GUIDE ASSY CRU
310	K-109	Connects HARNESS ASSY IDE and PWBA-CF CARD Option:Connects HDD Cable and HDD
411	K-106	Connects COVER OPEN SW and HARNESS ASYY LVPS
480	W-126	Connects HARNESS ASSY 100V and POWER SWITCH
1821	A-107	Connects GUIDE TRAY L ASSY and HARNESS ASSY LVPS
2083	H-111	Connects HARNESS ASSY FDR1 and HARNESS ASSYFDR2
2750	S-128	Connects HARNESS ASSY LVPS and HARNESS ASSY DUP
3070 *1	M-120	Connects HARNESS ASSY OCT1 and HARNESS ASSY OCT2
4647	T-127	Connects HARNESS ASSY FUSER and FUSER ASSY

*1:500 PAPER EXIT Only.

2.2 P/J layout diagram (24PPM)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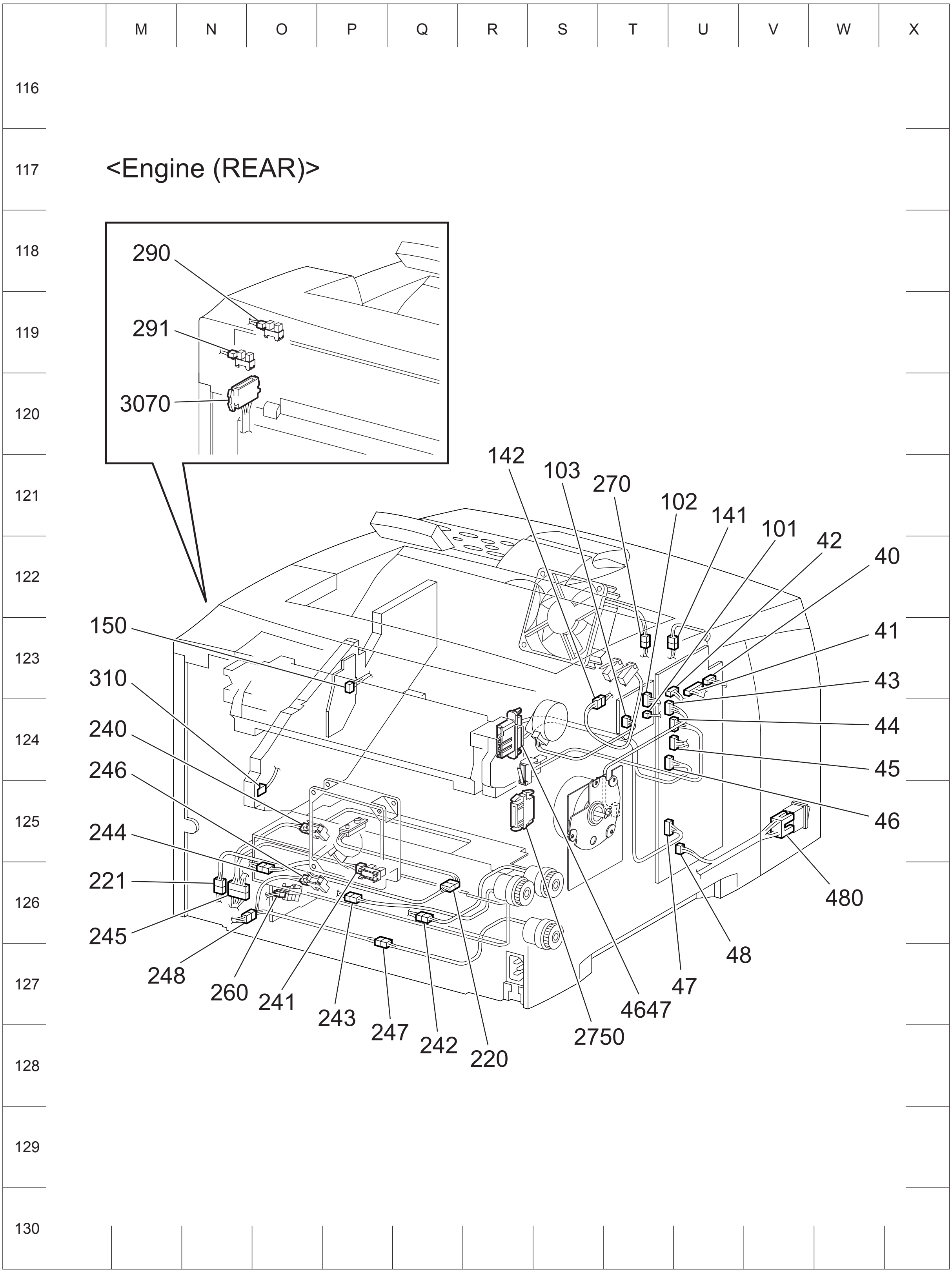
JG4001OA

<Engine (REAR)>


M
N
O
P
Q
R
S
T
U
V
W
X

JG4002AA

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1. Summary of Print Process

Electrophotography is used in JIGEN printer to print image on paper using a video signal sent from the PWBA ESS to the MCU of the HVPS/MCU. The electrophotography is composed of the following 7 steps.

(1) Charging

Negative charges are uniformly distributed over the surface of the drum by Bias Charge Roll.

(2) Exposure

The laser scanner scans the surface of the drum with a quite thin laser beam modulated according to the signal from the PWBA ESS (controller), to create an invisible electrostatic latent image on the drum surface.

(3) Development

During development, toner particles are attracted to the electrostatic latent image on the drum surface. Thus, a visible toner image is created.

(4) Transfer

The toner image is transferred from the drum surface to the paper.

(5) Peeling

Electric charges on the paper are partially neutralized. As a result, the paper is peeled off from the drum surface.

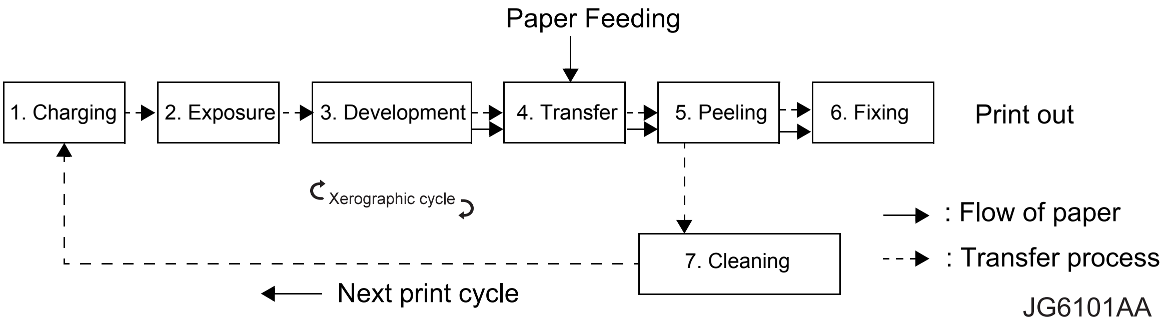
(6) Fixing

The toner image is permanently fixed to the paper by heat and pressure.

(7) Cleaning

The remaining toner is removed from the drum surface.

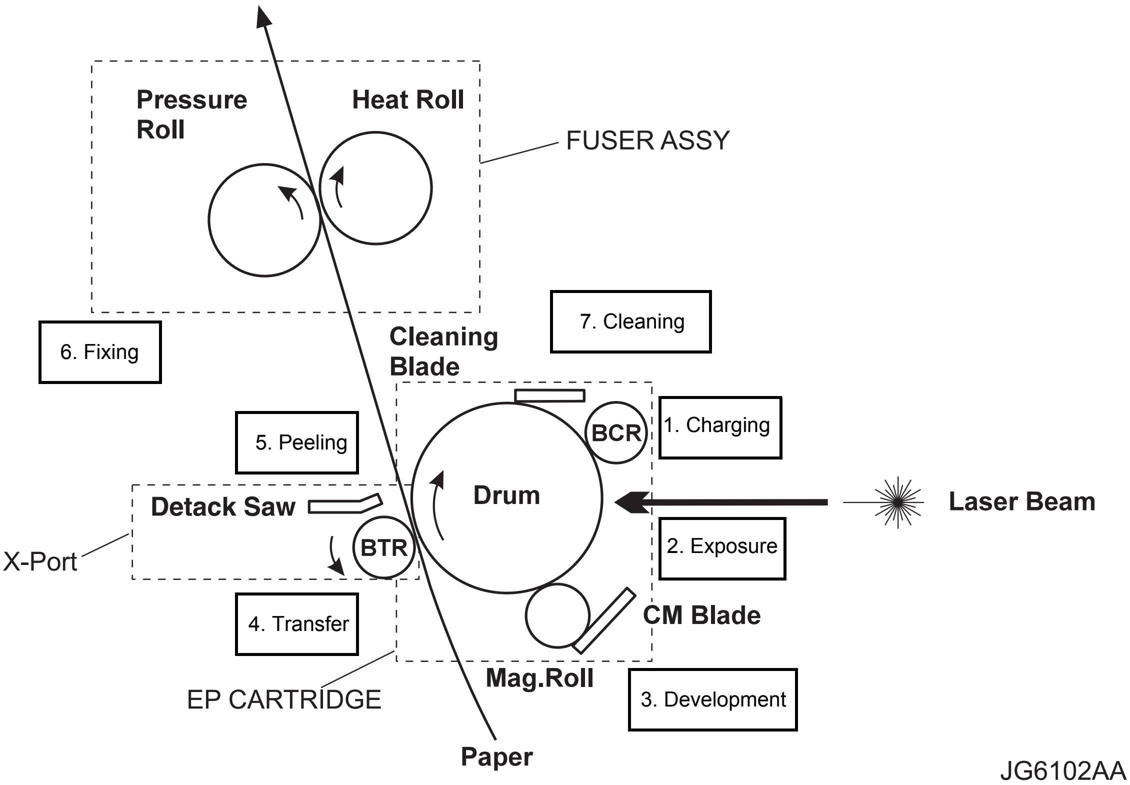
- Summary of print process


Paper Feeding
1. Charging
2. Exposure
3. Development
4. Transfer
5. Peeling
6. Fixing
Print out
Xerographic cycle
7. Cleaning
Next print cycle
: Flow of paper
: Transfer process
JG6101AA

By rotating the drum, the surface undergoes various steps including charging, exposure, development, transfer, peeling, and cleaning. A toner image is created on the surface of the drum and transferred to the paper. The paper is subjected to some steps including transfer, peeling, and fixing by the paper transport mechanism. When the paper is placed in position relative to the image, the toner image is transferred to the paper from the drum surface, and then fixed.

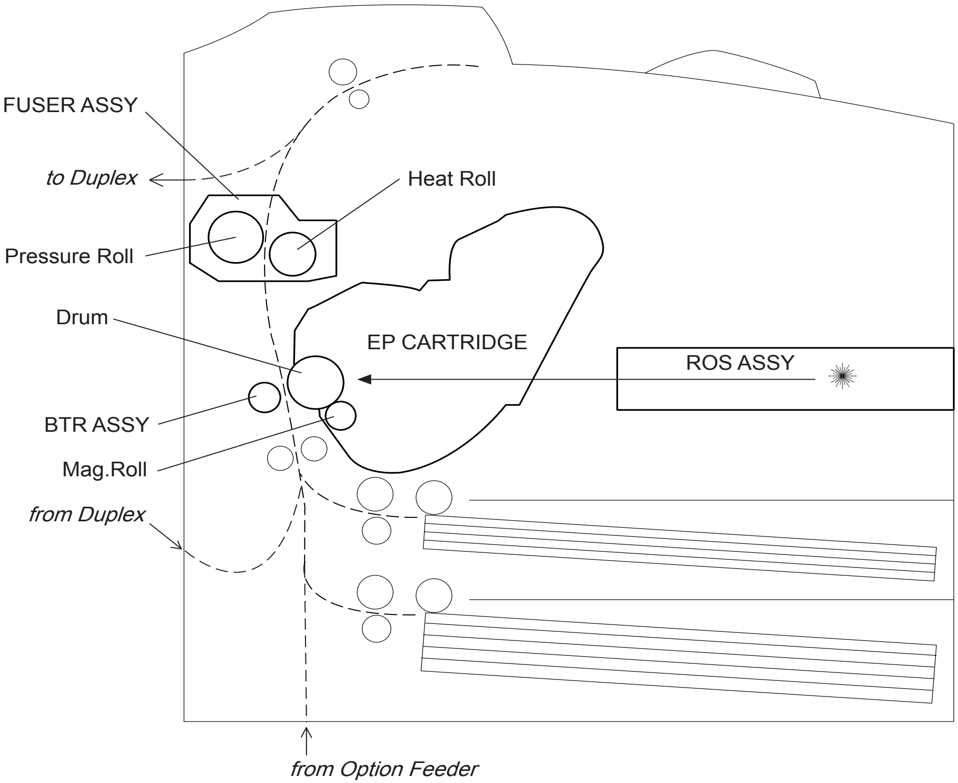
Main components directly associated with the print process and transport of the paper are shown in the following figure.

- Components associated with print process


Pressure Roll
Heat Roll
FUSER ASSY
6. Fixing
7. Cleaning
Cleaning Blade
5. Peeling
BCR
1. Charging
Drum
Laser Beam
Detack Saw
BTR
X-Port
2. Exposure
CM Blade
4. Transfer
EP CARTRIDGE
Mag.Roll
3. Development
Paper

JG6102AA

- Components associated with transport of paper


FUSER ASSY
to Duplex
Heat Roll
Pressure Roll
Drum
EP CARTRIDGE
ROS ASSY
BTR ASSY
Mag.Roll
from Duplex
from Option Feeder

JG6103AA

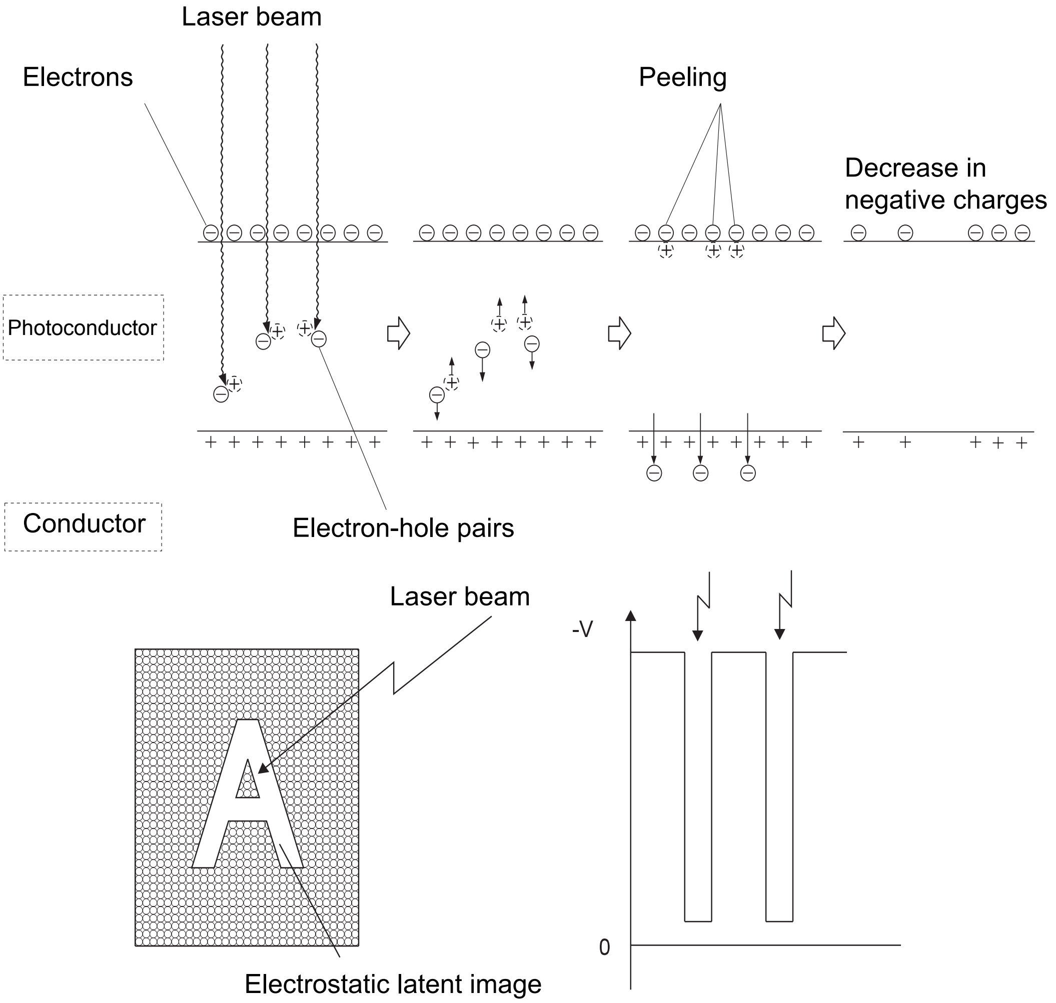
In the exposure step, the surface of the drum negatively charged by the previous charging step is scanned by a thin laser beam. The light radiated from the laser diode of the ROS (Raster Output Scanner) scans the drum from one end to the other. The light passes via a rotating polygon mirror (12 facets for 34PPM, and 6 facets for 24PPM) and also via a lens.

The radiation of the laser beam is adjusted according to a video signal from the PWBA ESS.

The laser beam shot at the drum excites electrons directed to the photoconductor. As a result, electron-hole pairs are induced in the photoconductive layer. Since electrons are moved toward the body inside the drum by the electric field, the electron-hole pairs move to the surface of the photoconductive layer. Negative charges in this portion decrease, thus creating an invisible electrostatic latent image there.

Toner particles are adsorbed onto this electrostatic latent image in the next step. Thus, the image is developed. The toner particles adsorbed to the drum are attracted to positive charges supplied by the BTR, and are transferred to the paper. The drum is sent for peeling and cleaning steps.

- Electrostatic latent image formed on drum


Laser beam
Electrons
Peeling
Decrease in negative charges
Photoconductor
Conductor
Electron-hole pairs
Laser beam
A
Electrostatic latent image
-V
0

JG6104AA

In the cleaning step, the remaining toner is removed from the drum surface. The drum surface is prepared for the next cycle.
The toner is scraped off the drum surface by a cleaning blade.

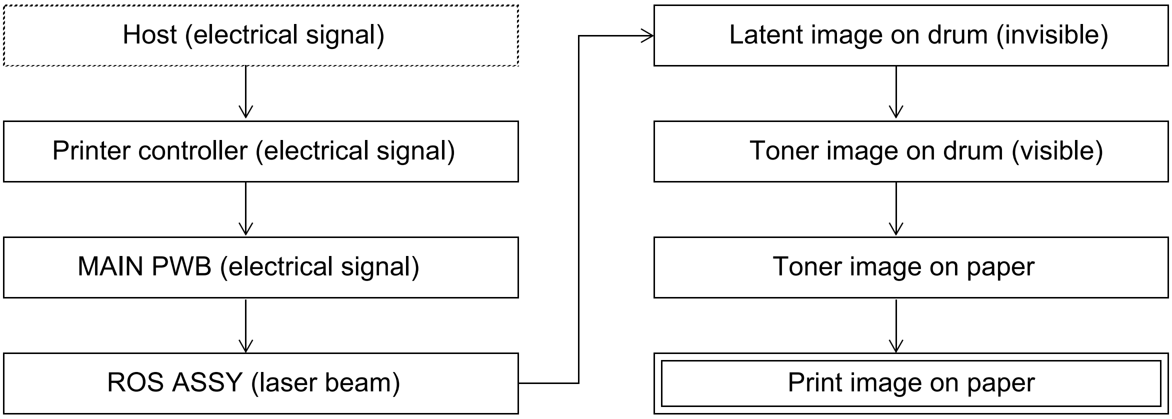
NOTE

The toner scraped off in the cleaning step is collected in a recovery toner compartment partitioned from unused toner. The transfer rate is normally more than 90%, but varies according to the image coverage range and environmental conditions such as temperature and humidity. The used toner cannot be reused.
When the printing step is started, the whole drum surface is scanned with a laser beam. If charges generated in the previous step remain on the drum surface, they are completely removed. When the continuous printing step is started and finished, a negative high voltage is applied to the BTR. If toner particles adhere to the BTR in the previous printing step, the toner particles are returned to the drum surface. In this way, the surface of the BTR is cleaned.

2. Flow of Print Data

The NIC (Network Interface Card) of the printer connected with a network receives a packet signal in a bit stream from a client or server of the network, and decomposes the packet signal received next into a data format adapted for a layer from which the data is sent to the Controller. The Controller processes the data from the NIC by the same method as for data received from the host computer via a parallel port. (These two types of data are referred to as host data.)
PWBA ESS acts to buffer the rasterized bit-image host data or converts host data in PDL (Page Description Language) into rasterized bit-image data. The PWBA ESS sends each line of the rasterized bit-image data to the MCU of the HVPS/MCU whenever the laser beam makes a scan.
This signal carrying image data (/VDO signal) is converted into LVDS signal by the MCU of the HVPS/MCU, and is sent as XP.DATA+ and XP.DATA- signals to the ROS ASSY, where the signal is converted into a laser beam. The beam is emitted with a quite small diameter. The beam is turned ON and OFF according to the video signal. The laser beam is reflected off the surface of a rotating polygon mirror, so that the beam is concentrated to the surface of the drum of the EP CARTRIDGE by a series of lenses. As a result, an electrostatic latent image is created on the drum surface.

Print data (electrical signal) from the printer controller is converted into a print image through the following flow.

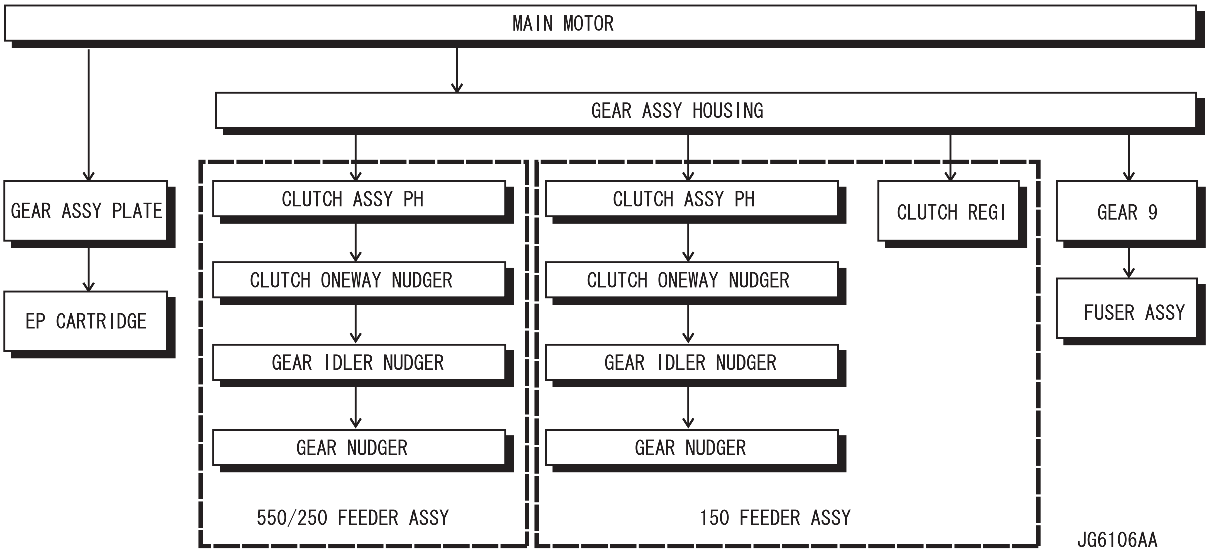

Host (electrical signal)
Printer controller (electrical signal)
MAIN PWB (electrical signal)
ROS ASSY (laser beam)
Latent image on drum (invisible)
Toner image on drum (visible)
Toner image on paper
Print image on paper

JG6105AA

3. Driving Force Transmission Path

3.1 MAIN MOTOR

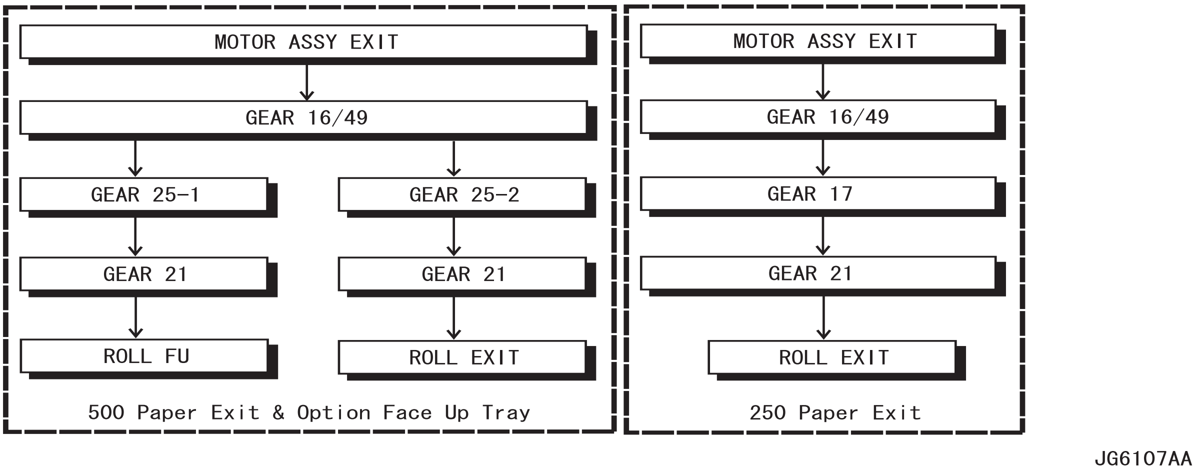
The rotating force of the MAIN MOTOR is transmitted via gears in the GEAR ASSY HOUSING and via the GEAR ASSY PLATE to components that need mechanical driving force as shown in the following flow.


MAIN MOTOR
GEAR ASSY HOUSING
GEAR ASSY PLATE
EP CARTRIDGE
CLUTCH ASSY PH
CLUTCH ONEWAY NUDGER
GEAR IDLER NUDGER
GEAR NUDGER
550/250 FEEDER ASSY
CLUTCH ASSY PH
CLUTCH ONEWAY NUDGER
GEAR IDLER NUDGER
GEAR NUDGER
CLUTCH REGI
150 FEEDER ASSY
GEAR 9
FUSER ASSY
JG6106AA

The driving force transmitted to the EP CARTRIDGE drives the Drum, and is transmitted to the BTR ASSY through the Drum Gear.
The driving force transmitted to the 550 FEEDER ASSY drives the ROLL ASSY NUDGER and ROLL ASSY FEED.
The driving force transmitted to the 150 FEEDER ASSY drives the ROLL REGI METAL and ROLL REGI RUBBER, as well as the ROLL ASSY NUDGER and ROLL ASSY FEED.
The driving force transmitted to the FUSER ASSY drives the Heat Roll.

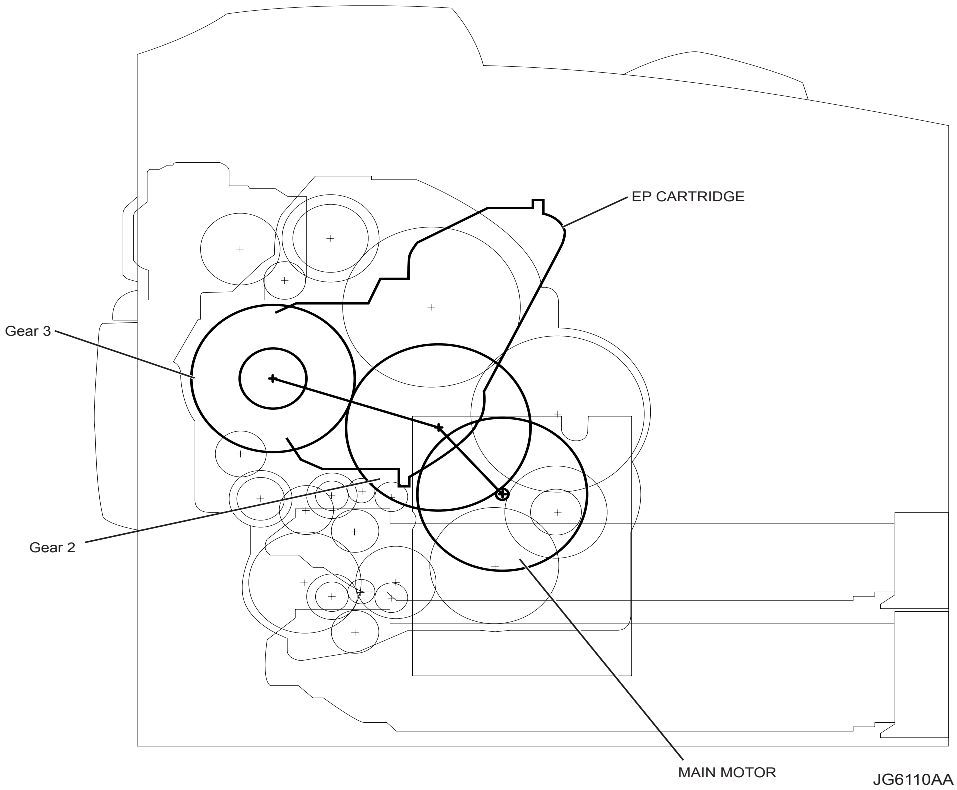
3.2 MOTOR ASSY EXIT

The rotating force of the MOTOR ASSY EXIT is transmitted via various gears to components that need mechanical driving force as shown in the following flow.

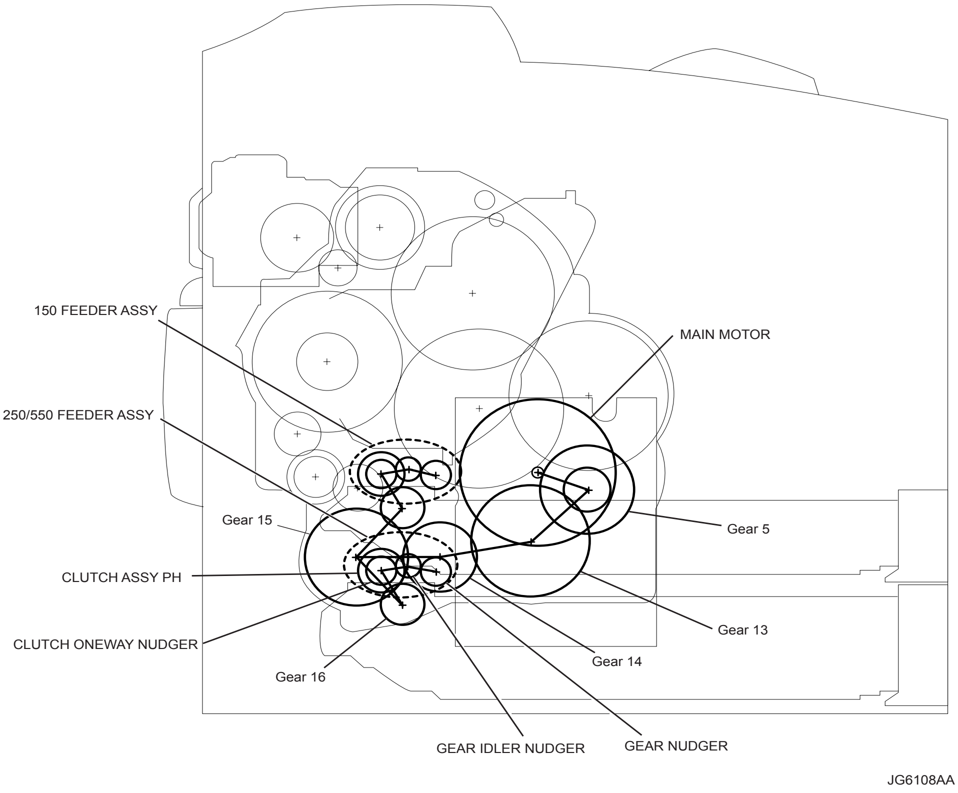

MOTOR ASSY EXIT
GEAR 16/49
GEAR 25-1
GEAR 25-2
GEAR 21
GEAR 21
ROLL FU
ROLL EXIT
500 Paper Exit & Option Face Up Tray
MOTOR ASSY EXIT
GEAR 16/49
GEAR 17
GEAR 21
ROLL EXIT
250 Paper Exit
JG6107AA

3.3 Gear Layout

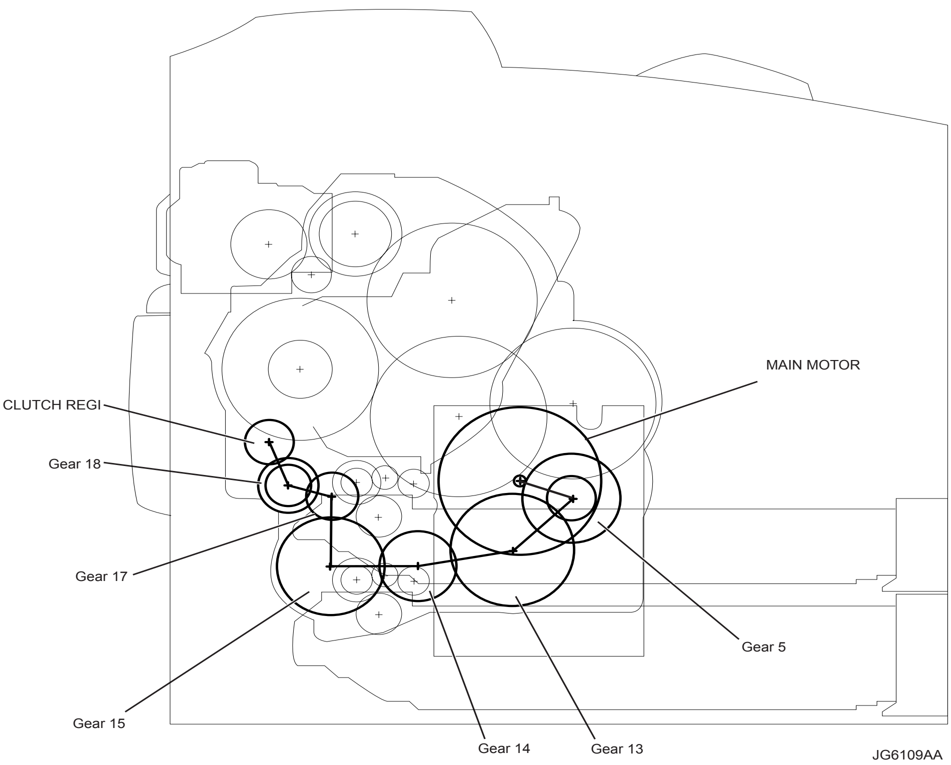
- Drive path in EP CARTRIDGE


EP CARTRIDGE
Gear 3
Gear 2
MAIN MOTOR
JG6110AA

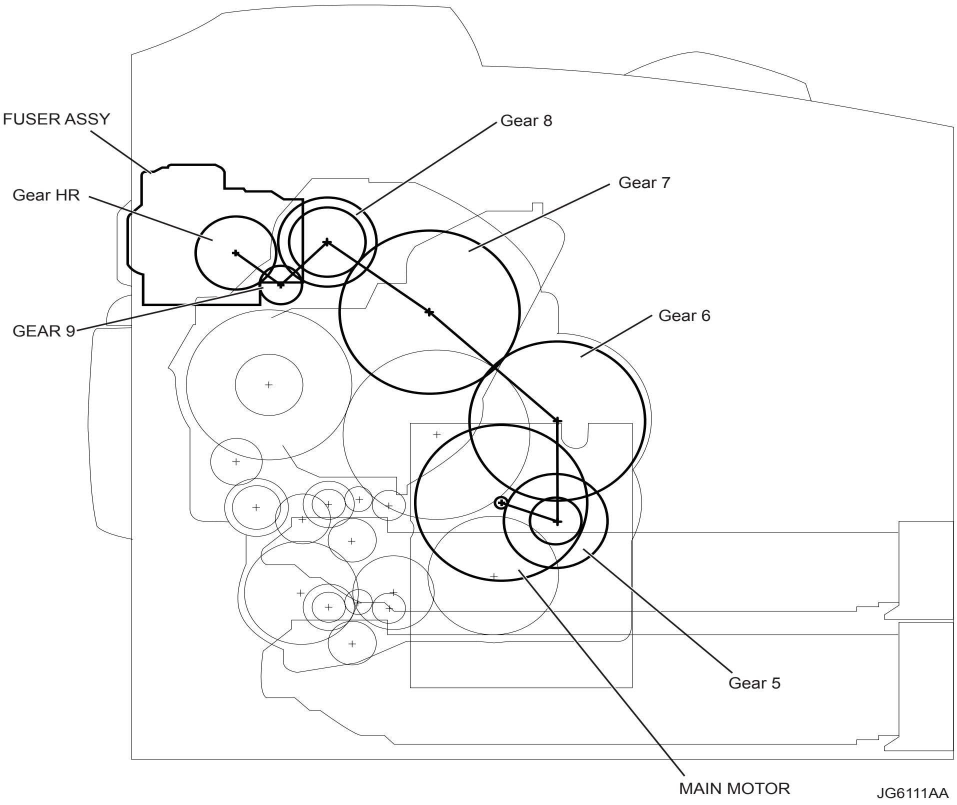
- Drive path in FEEDER ASSY


150 FEEDER ASSY
250/550 FEEDER ASSY
MAIN MOTOR
Gear 15
Gear 5
CLUTCH ASSY PH
Gear 13
CLUTCH ONEWAY NUDGER
Gear 14
Gear 16
GEAR IDLER NUDGER
GEAR NUDGER
JG6108AA

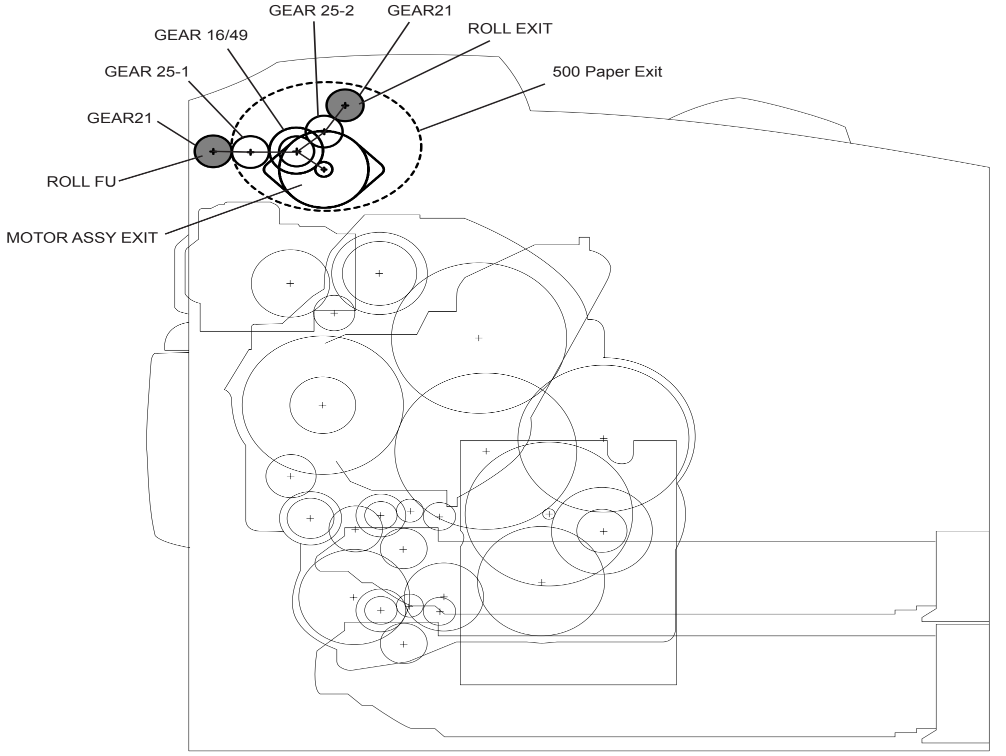
- Drive path in CLUTCH REGI


MAIN MOTOR
CLUTCH REGI
Gear 18
Gear 17
Gear 15
Gear 14
Gear 13
Gear 5
JG6109AA

- Drive path in FUSER ASSY

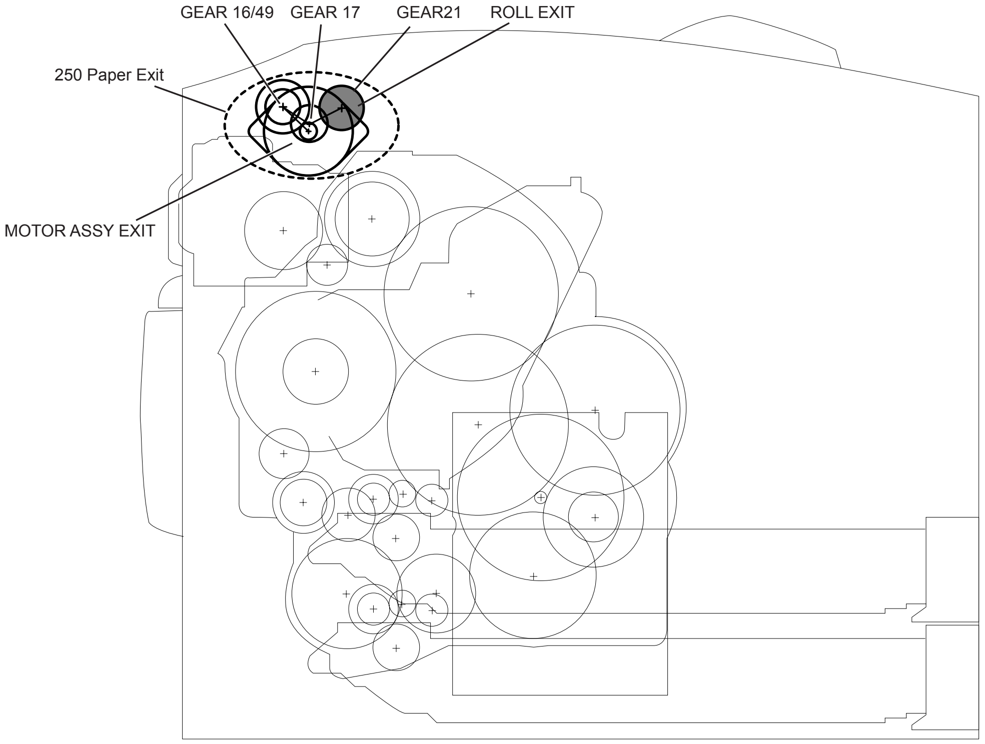

FUSER ASSY
Gear 8
Gear HR
Gear 7
GEAR 9
Gear 6
Gear 5
MAIN MOTOR
JG6111AA

- Drive path in 500 Paper Exit & Option Face Up Tray


GEAR 25-2
GEAR21
GEAR 16/49
ROLL EXIT
GEAR 25-1
500 Paper Exit
GEAR21
ROLL FU
MOTOR ASSY EXIT

JG6112AA

- Drive path in 250 Paper Exit

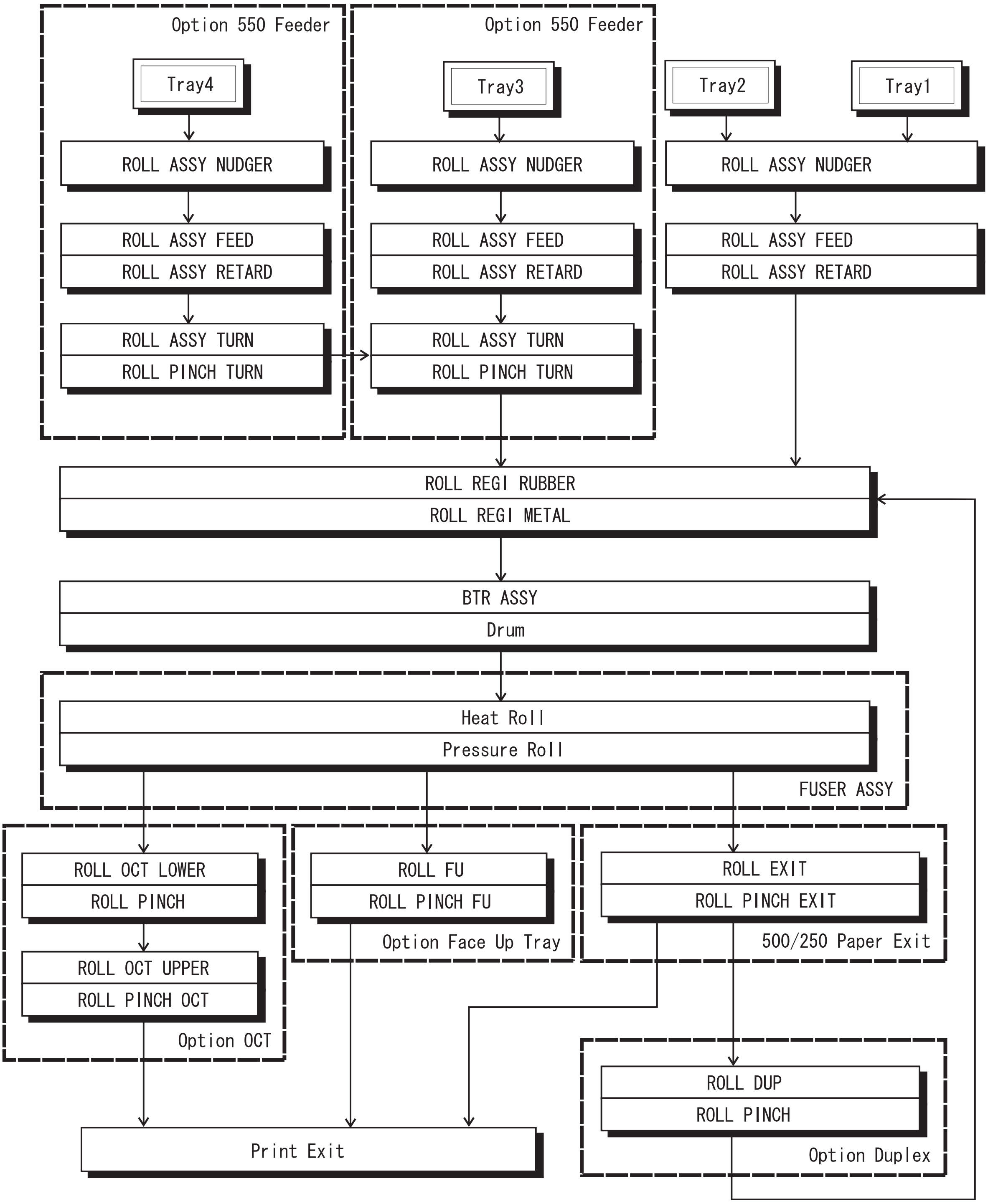

GEAR 16/49
GEAR 17
GEAR21
ROLL EXIT
250 Paper Exit
MOTOR ASSY EXIT

JG6012AA

4. Paper Transport

4.1 Paper Transport Path

The paper is supplied from the Tray1 and Tray 2 or the optional Tray3 and Tray 4, and is transported into the printer along the paper path shown below.

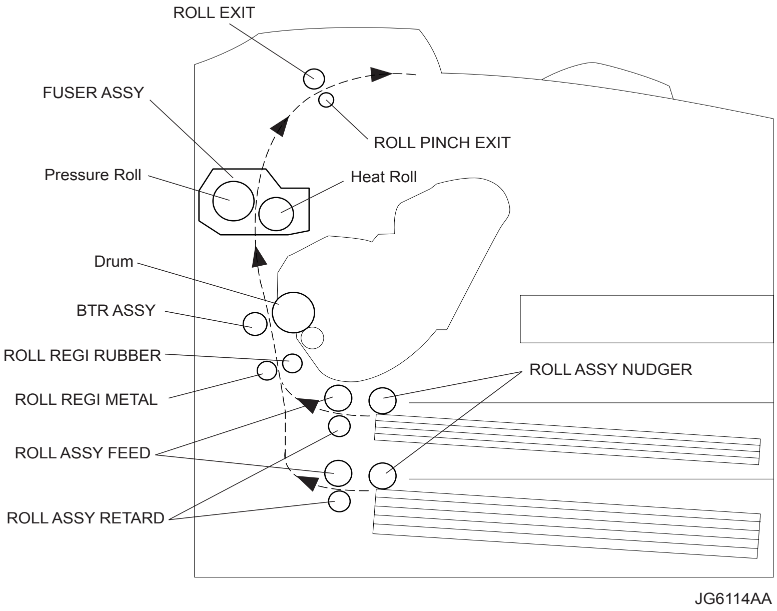

Option 550 Feeder
Tray4
ROLL ASSY NUDGER
ROLL ASSY FEED
ROLL ASSY RETARD
ROLL ASSY TURN
ROLL PINCH TURN
Option 550 Feeder
Tray3
ROLL ASSY NUDGER
ROLL ASSY FEED
ROLL ASSY RETARD
ROLL ASSY TURN
ROLL PINCH TURN
Tray2
Tray1
ROLL ASSY NUDGER
ROLL ASSY FEED
ROLL ASSY RETARD
ROLL REGI RUBBER
ROLL REGI METAL
BTR ASSY
Drum
Heat Roll
Pressure Roll
FUSER ASSY
ROLL OCT LOWER
ROLL PINCH
ROLL OCT UPPER
ROLL PINCH OCT
Option OCT
ROLL FU
ROLL PINCH FU
Option Face Up Tray
ROLL EXIT
ROLL PINCH EXIT
500/250 Paper Exit
ROLL DUP
ROLL PINCH
Option Duplex
Print Exit

JG6113AA

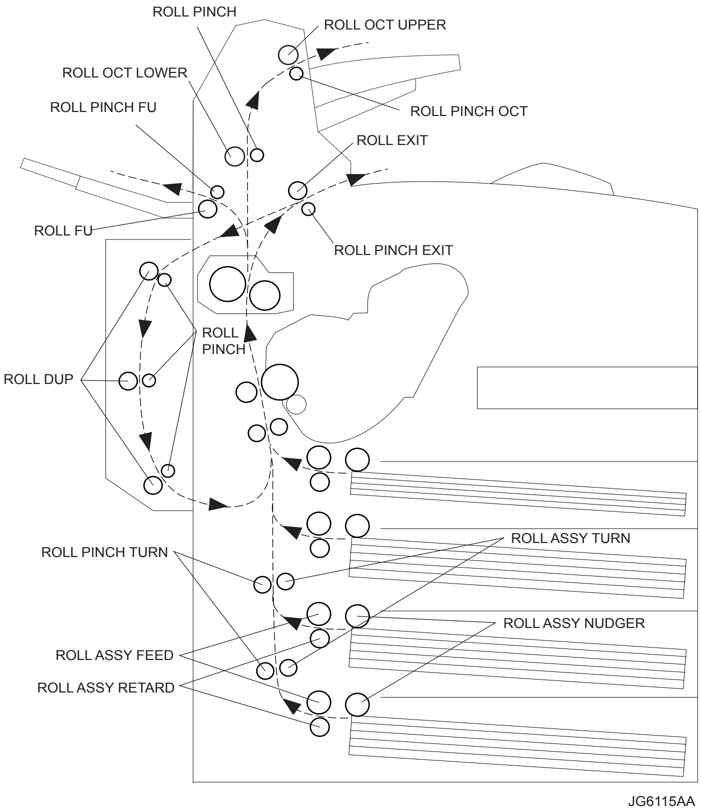
4.2 Layout of Paper Transport Path

The following is a cross section of the JIGEN printer. Main components directly associated with the paper path and transport are shown here.

- Main components associated with transport of paper (only engine)


ROLL EXIT
FUSER ASSY
ROLL PINCH EXIT
Pressure Roll
Heat Roll
Drum
BTR ASSY
ROLL REGI RUBBER
ROLL ASSY NUDGER
ROLL REGI METAL
ROLL ASSY FEED
ROLL ASSY RETARD
JG6114AA

- Main components associated with transport of paper
  (when Option Duplex, Option 550 Feeder, Option OCT and 500 Paper Exit & Option Face Up Tray are installed)


ROLL PINCH
ROLL OCT UPPER
ROLL OCT LOWER
ROLL PINCH FU
ROLL PINCH OCT
ROLL EXIT
ROLL FU
ROLL PINCH EXIT
ROLL PINCH
ROLL DUP
ROLL ASSY TURN
ROLL PINCH TURN
ROLL ASSY NUDGER
ROLL ASSY FEED
ROLL ASSY RETARD
JG6115AA

5. Actions of Main Functional Components

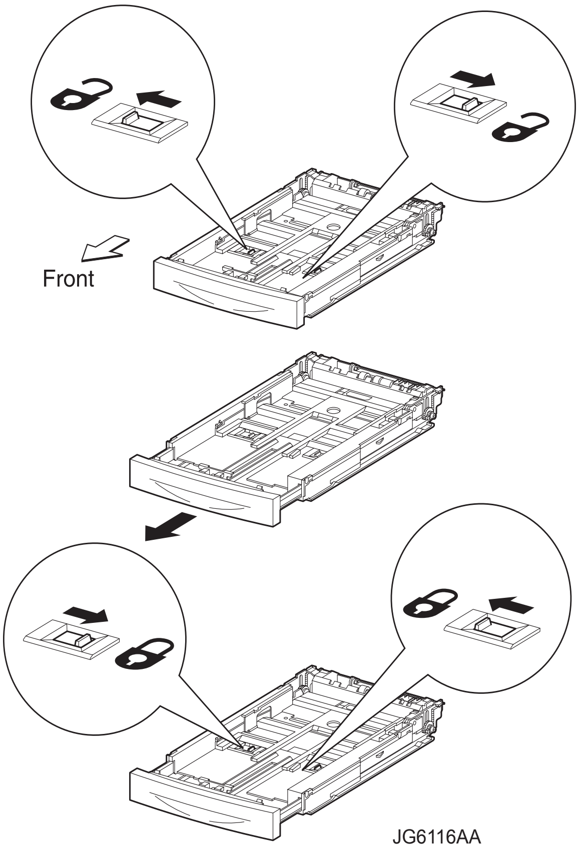
The functions of the main components of the JIGEN printer are described in the following sections:

5.1 Paper Cassette
5.2 Paper Feeder
5.3 Xero
5.4 Fuser
5.5 500 Paper Exit & Option Face Up Tray / 250 Paper Exit
5.6 Drive
5.7 Electrical

5.1 Paper Cassette

Paper cassette models available include the 150 Paper Cassette, the 250 Paper Cassette and the 550 Paper Cassette. They are functionally equivalent, therefore only the 150 Paper Cassette is described here. Since a LOW INDICATOR does not exist on the 150 and 250 models, explanation for this indicator applies to the 550 Paper Cassette only.

If the paper is smaller than A4, adjust the GUIDE ASSY END 150 and GUIDE ASSY SD on the Paper Cassette to match the size. If the paper is larger than A4, disengage the EXTENSION that locks the HOUSING BASE 150 and HOUSING EXTENSION 150, and pull out the extension. Then adjust the GUIDE ASSY END 150 and GUIDE ASSY SD to match the size. When the extension is returned its original position, the LOCK EXTENSION locks automatically.



GUIDE ASSY L150 and GUIDE ASSY SD R150

The GUIDE ASSY SD R150 can be adjusted to different paper sizes by moving it to the left or right. The guides come into contact with the left and right edges of the paper and hold it in position. The GUIDE ASSY SD L150 moves simultaneously with the GUIDE ASSY SD R150.

LOCK EXTENSION

The 150 Paper Cassette is so constructed that it can cope with the length of the paper in the direction of travel by moving the position of the HOUSING EXTENSION150 forward and backward. The LOCK EXTENSION is adopted as a mechanism for holding the HOUSING EXTENSION150 in position.

GUIDE ASSY END150

This can be adjusted to different paper sizes by making a forward or backward adjustment. This makes contact with the rear end of the paper, and holds it in position in the forward and rearward directions.

The paper size to which the cassette is set is transmitted to the LINK SW SIZE 1/2/3 via the GEAR SECTOR and RACK SIZE by the GUIDE ASSY END150. The three LINK SW SIZE units turns ON or OFF respectively according to the transmitted paper size. The paper size is detected by transmitting the ON/OFF information to the Size Switch in the GUIDE TRAY LEFT. The types of paper that can be automatically detected are as follows:

Type	Size (mm × mm)
Letter SEF	215.9 × 279.4
Legal 14" SEF	215.9 × 355.6
Legal 13" SEF	215.9 × 330.2
Executive SEF	184.2 × 266.7
A4 SEF	210.0 × 297.0
B5 (JIS) SEF	182.0 × 257.0
A5 SEF	148.5 × 210.0

LEVER BTM LOCK and STOPPER GEAR

These are at the rear end of the cassette (i.e. the exit path of the paper). When the cassette is inserted into the printer, the protrusions on the Feeder trigger the mechanism that depresses the LEVER BTM LOCK, slides the RACK BTM LOCK 150, and then simultaneously unlocks the GEAR PINION and GEAR PB R of the STOPPER GEAR.

PLATE ASSY BTM

The force pushing up the PLATE ASSY BTM is supplied via the SPRING BTM UP150 by unlocking the LEVER BTM LOCK and STOPPER GEAR. When the PLATE ASSY BTM is pushed up, the supplied paper and ROLL ASSY NUDGER touch each other.

LOW INDICATOR

The LOW INDICATOR is installed only on the 550 Paper Cassette. The amount of paper remaining in the cassette is indicated by the LOW IND FRONT. As the amount of paper reduces, the PLATE ASSY BTM rises and the LOW IND FRONT goes down in the GUIDE INDICATOR.

● 150 Paper Cassette

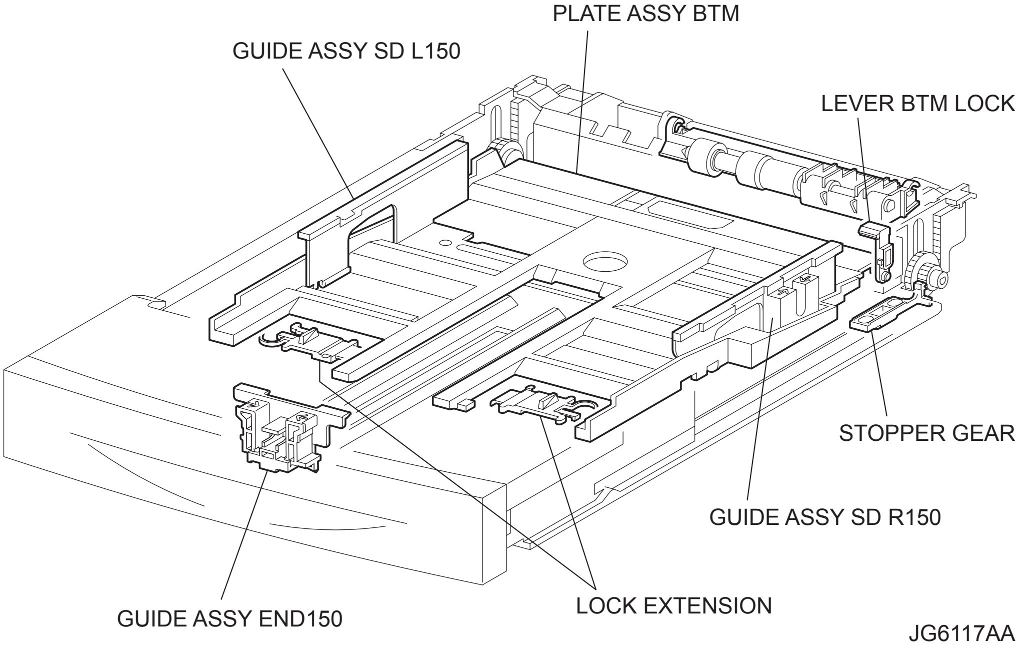


PLATE ASSY BTM
GUIDE ASSY SD L150
LEVER BTM LOCK
STOPPER GEAR
GUIDE ASSY SD R150
LOCK EXTENSION
GUIDE ASSY END150
JG6117AA

● 550 Paper Cassette

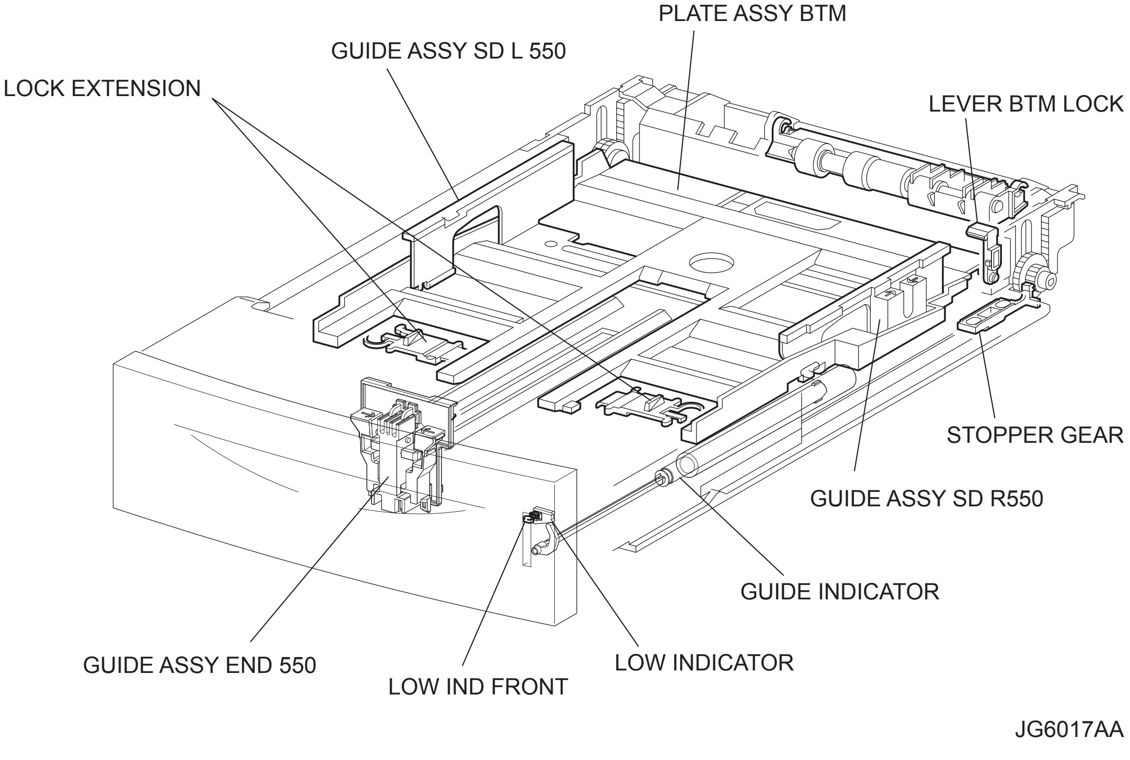


PLATE ASSY BTM
GUIDE ASSY SD L 550
LOCK EXTENSION
LEVER BTM LOCK
STOPPER GEAR
GUIDE ASSY SD R550
GUIDE INDICATOR
GUIDE ASSY END 550
LOW IND FRONT
LOW INDICATOR
JG6017AA

5.2 Paper Feeder

Since the Tray1 and Tray2 are functionally equivalent in terms of the Size Switch, ACTUATOR NO PAPER, and SENSOR NO PAPER, only the components of one tray are described here.
Since the ACTUATOR LOW PAPER and SENSOR LOW PAPER are not installed in the Tray1, the description of these components applies to the Tray2 only.

150 FEEDER ASSY(Tray1) / 550/250 FEEDER ASSY(Tray2)

This is a mechanism for supplying paper from the Paper Cassette into the printer. The driving force from the MAIN MOTOR is transmitted via the CLUTCH ASSY PH to the ROLL ASSY FEED and ROLL ASSY NUDGER that are components of FEEDER ASSY. Thus, the paper is transported.
When the ROLL ASSY NUDGER picks up some sheets of paper and the paper gets low, the position of the ROLL ASSY NUDGER drops accordingly. The lowered ROLL ASSY NUDGER pushes down the lock lever of the PLATE ASSY BTM, releasing it. The PLATE ASSY BTM is pushed up by a spring, and thus the paper is raised. The raised paper then raises the SUPPORT NUDGER. The SUPPORT NUDGER disengages from the lock lever of the PLATE ASSY BTM. The PLATE ASSY BTM stops moving upward.

Size Switch

A switch for setting the size of paper supplied from each Paper Cassette is mounted. A signal indicating the set size is transmitted as a voltage to the HVPS/MCU.

ACTUATOR NO PAPER

If paper runs out in the Paper Cassette, the ACTUATOR NO PAPER drops and the flag of the ACTUATOR NO PAPER that shielded the detection portion of the SENSOR NO PAPEER moves off the detection portion. Thus, the light is transmitted.

SENSOR NO PAPER

The presence or absence of paper in the Paper Cassette is detected by the position of the ACTUATOR NO PAPER. This is converted into an electrical signal. If the detection portion is shielded (i.e., there is paper), /NO-PAPER 1/2 SNR ON signal is turned OFF.

SENSOR REGI

The paper transported from the Paper Cassette pushes up the ACTUATOR B. The flag of the ACTUATOR A optically unshields the detection portion of the SENSOR REGI. Thus, the passage of paper is detected.

CLUTCH REGI

This electromagnetic clutch turns ON and OFF the driving force to the ROLL REGI RUBBER and ROLL REGI METAL, to place the paper in position.

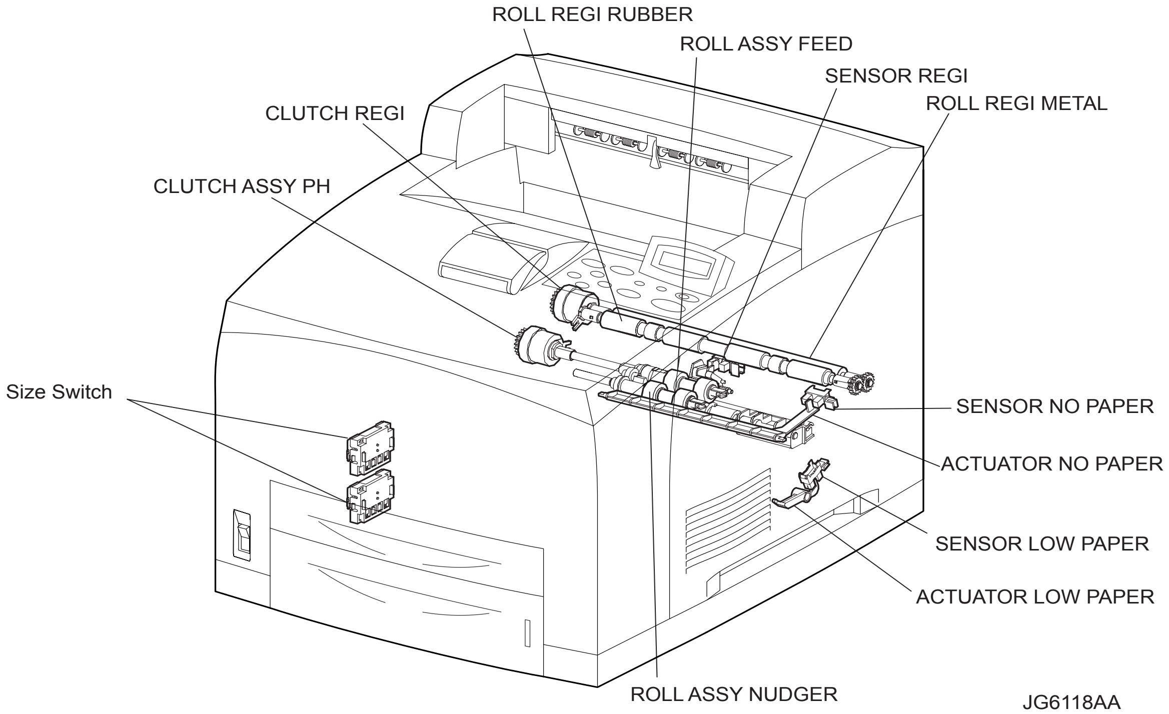
ACTUATOR LOW PAPER

When paper is low in the Paper Cassette installed in the Tray2, the arm of the ACTUATOR LOW PAPER is pushed up by the PLATE ASSY BTM. The flag of the ACTUATOR LOW PAPER that shielded the detection portion of the SENSOR LOW PAPER moves off the detection portion. Thus, the light is transmitted.

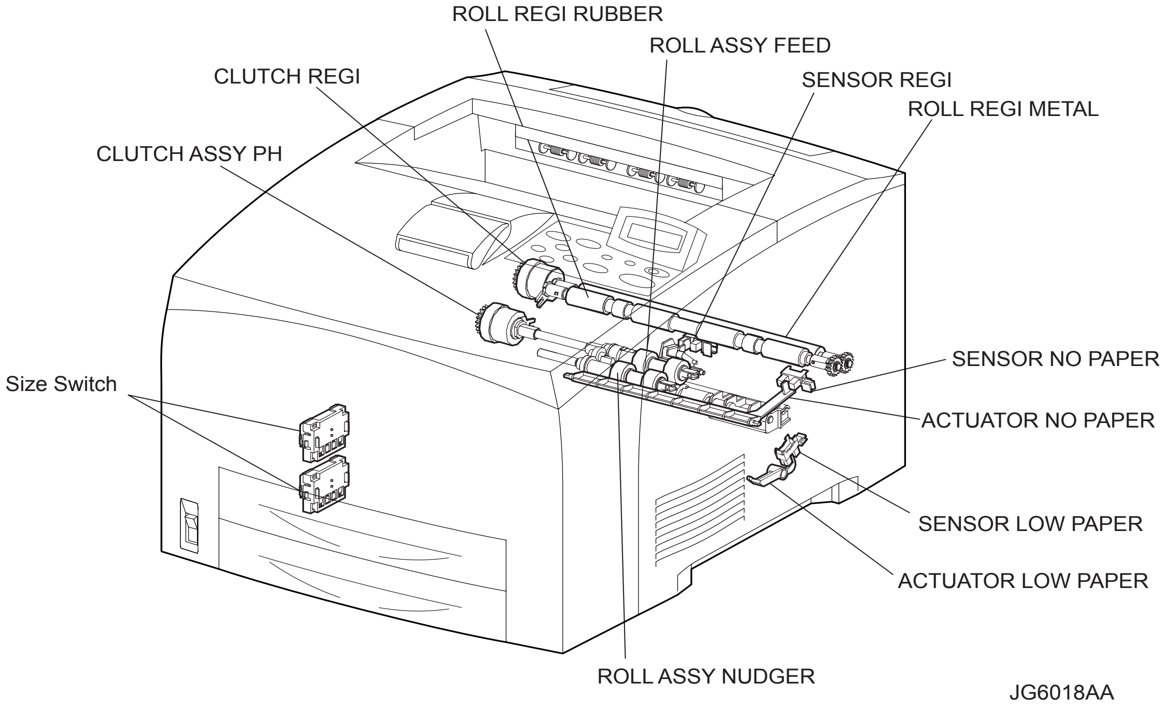
SENSOR LOW PAPER

When paper is low in the Tray2 Paper Cassette, this is detected by the position of the ACTUATOR LOW PAPER and converted into an electrical signal. When the detection portion is shielded (i.e. paper is high), /LOW PAPER SNR ON signal is turned OFF.

● 34PPM


ROLL REGI RUBBER
ROLL ASSY FEED
SENSOR REGI
ROLL REGI METAL
CLUTCH REGI
CLUTCH ASSY PH
Size Switch
SENSOR NO PAPER
ACTUATOR NO PAPER
SENSOR LOW PAPER
ACTUATOR LOW PAPER
ROLL ASSY NUDGER
JG6118AA

● 24PPM


ROLL REGI RUBBER
ROLL ASSY FEED
CLUTCH REGI
SENSOR REGI
ROLL REGI METAL
CLUTCH ASSY PH
SENSOR NO PAPER
Size Switch
ACTUATOR NO PAPER
SENSOR LOW PAPER
ACTUATOR LOW PAPER
ROLL ASSY NUDGER
JG6018AA

5.3 Xero

EP CARTRIDGE

The EP CARTRIDGE is also known as CRU (Customer Replaceable Unit), and is made up of the following five components.

- Drum

  This is a cylinder of aluminum and coated with a photoconductive material. Because of this photoconductive coating layer, electric charges are retained on the surface in the dark, and electrical conduction occurs when exposed to light.
- BCR (Bias Charge Roll)

  This uniformly distributes electric charges over the drum surface, and erases a charge-reduced pattern remaining from the previous cycle.
- Magnet Roll

  This holds toner as a thin layer on the surface of this roll, and acts to transport the toner into the gap between the drum and Magnet Roll. The toner is supplied to the Magnet Roll by the Agitator in the Toner Compartment.
- CM Blade (Charging and Metering Blade)

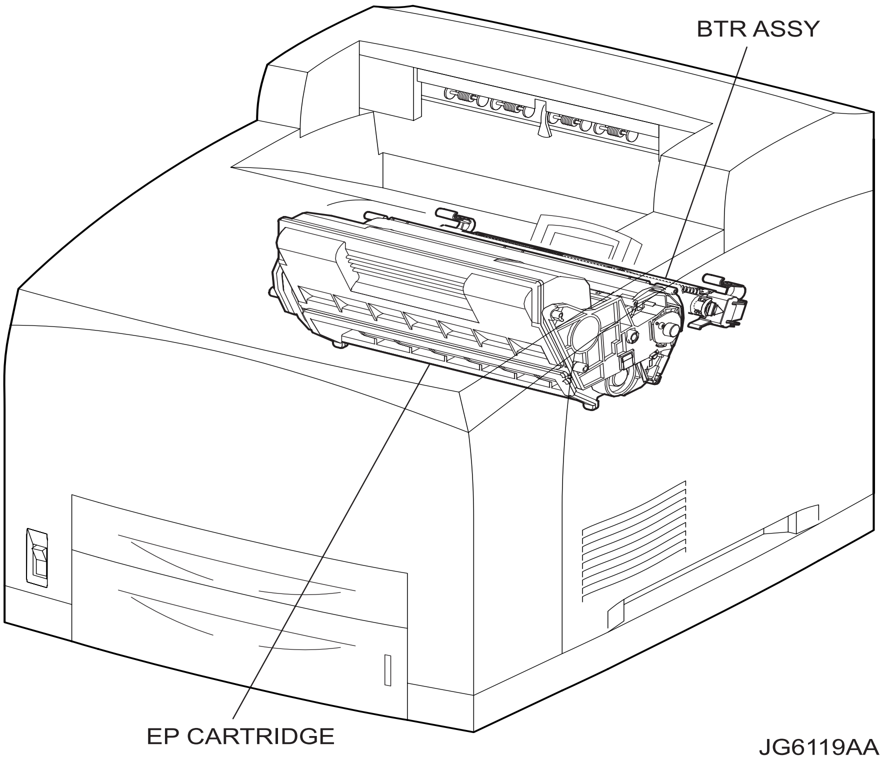
  This spreads the toner into a thin layer over the Magnet Roll, and applies negative charges to the toner triboelectrically.
- Cleaning Blade

  This scrapes toner remaining after the transfer step off the drum surface.

BTR ASSY

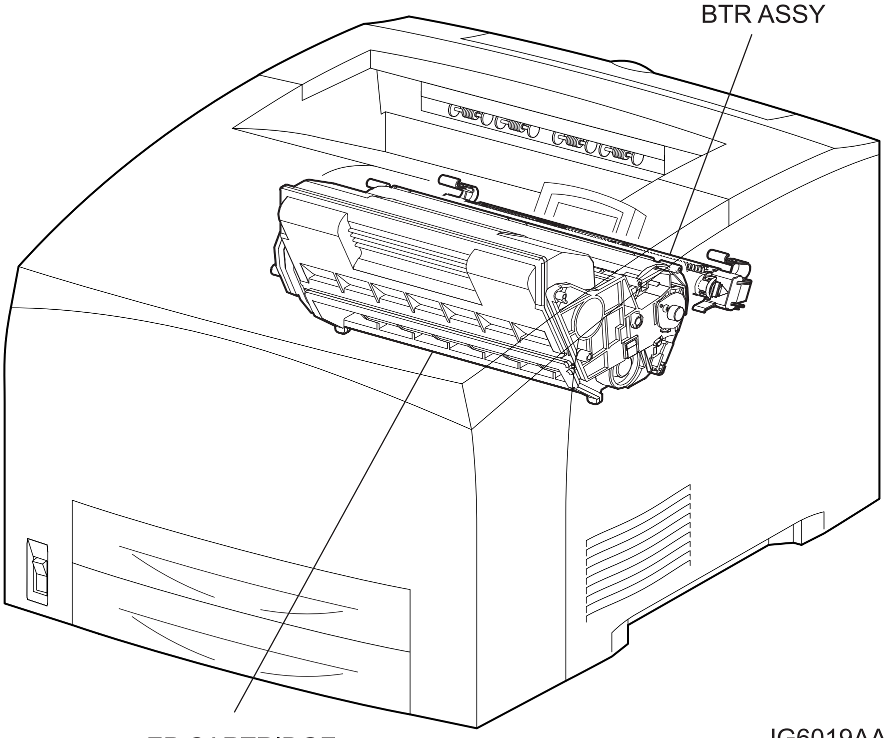
The BTR of the BTR ASSY is in contact with the drum of the EP CARTRIDGE, and is driven by the Drum Gear. When the paper moves between the BTR and Drum, the BTR applies positive charges to the rear surface of the paper. The negatively charged toner image is attracted by positive charges on the rear surface of the paper. Thus, the image is transferred from the surface of the drum to the surface of the paper.

- 34PPM


BTR ASSY
EP CARTRIDGE

JG6119AA

- 24PPM


BTR ASSY
EP CARTRIDGE

JG6019AA

ROS ASSY

The ROS (Raster Output Scanner) scans the surface of the drum with a laser beam. The ROS ASSY consists of the following three components, i.e., LD (Laser Diode) Assembly, Scanner Assembly, and SOS PWB.

- LD Assembly

  The LD Assembly produces a laser beam. This beam is turned ON and OFF according to a print data signal.

  The maximum nominal output of the semiconductor laser diode used as the laser light source, is listed below.

	600dpi Mode	1200dpi Mode
34PPM	10mW	10mW
24PPM	5mW	10mW

- Scanner Assemblyy

  The Scanner Assembly consists of a Polygon Mirror (12 facets for 34PPM, and 6 facets for 24PPM) and a Scanner Motor. The Polygon Mirror is mounted to the shaft of the Scanner Motor. The Scanner Motor rotates the Polygon Mirror at a specified speed. The rotating Polygon Mirror reflects the beam to the drum surface through lenses and mirrors, to scan the beam from one end to the other of the drum. One scan is made with one facet of the mirror.

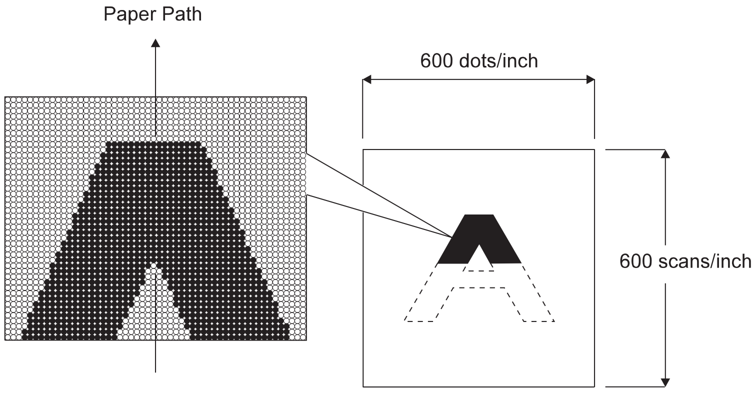
  The Scanner Motor is driven by three-phase, full-wave current linear drive. The current through the winding of each phase is switched by a Hall amplifier matrix. The signal from the phase detection terminal of the Motor is used.

- SOS PWB

  When the laser beam hits the SOS Sensor of the SOS PWB, the beam is converted into an electrical signal (SOS signal), and the initial position where a scan is started on each line is detected.

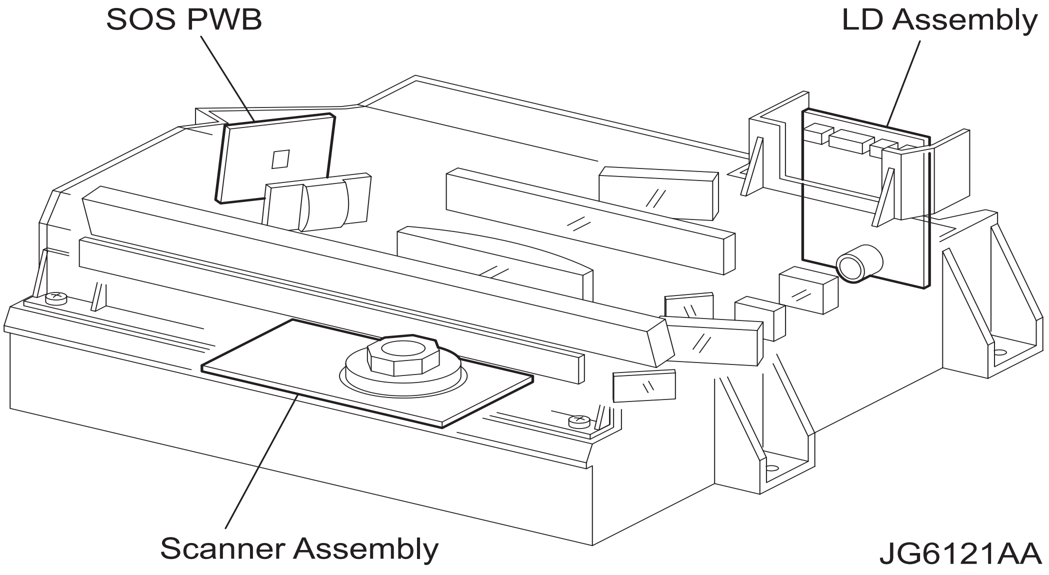
When the laser beam is scanned across the drum surface from one end to the other while turning ON and OFF the beam, one line of latent image is created. If the scanning by the laser beam is repeated while rotating the drum, a two-dimensional image is created. The resolution in the scanning direction (from right to left) is determined by the rotational speed of the Scanner Motor and by the speed at which the laser is adjusted. The resolution in the process direction (from top to bottom) is determined by the rotational speed of the Scanner Motor. (If the scanning speed is increased, the next row to be scanned can be started earlier accordingly.)

Conceptual diagram of image creation by scanning

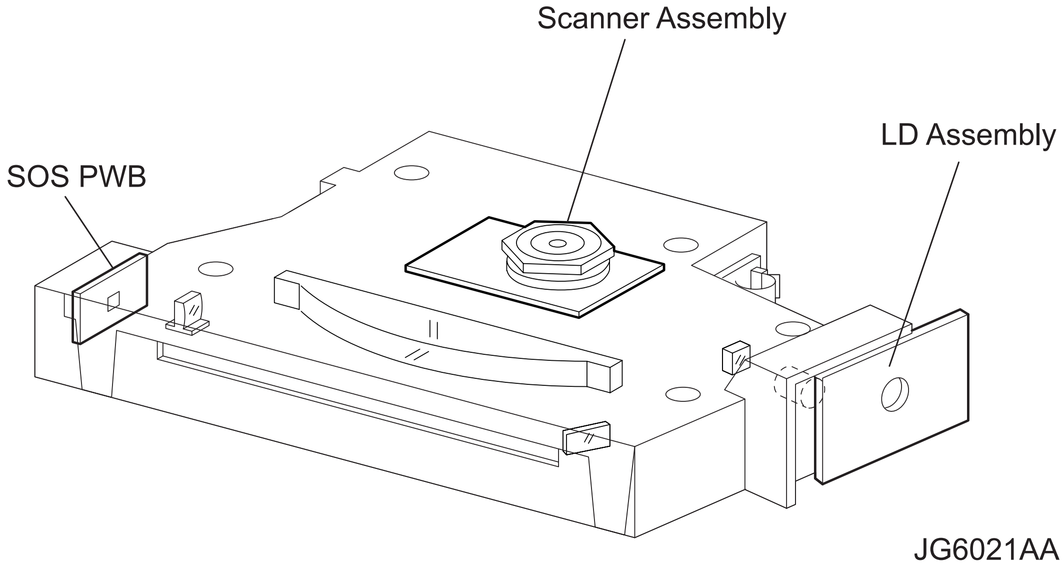


JG6120AA

● 34PPM


SOS PWB
LD Assembly
Scanner Assembly
JG6121AA

● 24PPM


Scanner Assembly
LD Assembly
SOS PWB
JG6021AA

5.4 Fuser

Heat Roll

This is a hollow metal tube having a coated surface. This tube is heated by the inside Heater Rod. Heat is applied to the paper passing between this roll and the Pressure Roll. This heat fuses and fixes the toner on the paper.

Pressure Roll

This is a metal shaft coated with sponge rubber. Pressure is applied to the paper between this roll and the Heat Roll. This pressure presses the melted toner against the paper.

Heater Assembly

The Heater Assembly consists of a Heater Rod located in a Heat Roll and a harness connecting the Heater Rod to a terminal. The Heater Rod consists of heater coil inside a quartz glass and heats up the Heat Roll.

Temperature Sensor

This is a resistor (thermister) having a known value of resistance that sensitively varies with temperature. This sensor is mounted in contact with the surface of the Heat Roll, and monitors the temperature of the surface. The power supply of the Heater Rod is turned ON and OFF using the signal from this sensor, so that the surface temperature of the Heat Roll can be maintained within a specified range. This signal is also used to provide a first stage of overheat protection.

Thermostat Sensor (STS)

Two STS are installed in the 34PPM and one in the 24PPM. The STS are connected to the Heat Roll in series for both 34PPM and 24PPM.

This provides a second stage of overheat protection. If the first stage does not prevent the Fuser from overheating, the Thermostat cuts off the power-supply circuit for the Heater Rod. The STS operates as follows.

(1) If the paper is set incorrectly, the Pressure Roll may melt and adhere. As a countermeasure against this, the power-supply circuit is cut off to cool down the roll, if the detected temperature gets higher than a preset temperature.

(2) If the temperatures increase at both sides of the Heat Roll, both ends of the paper may curl. As a countermeasure against this, the mode is switched to Short lamp lighting to control the temperature rise, if the detected temperature exceeds the preset temperature.

Heat Roll Fingers

These fingers peel off the leading edge of the paper from the Heat Roll to prevent the paper from getting wound around the Heat Roll.

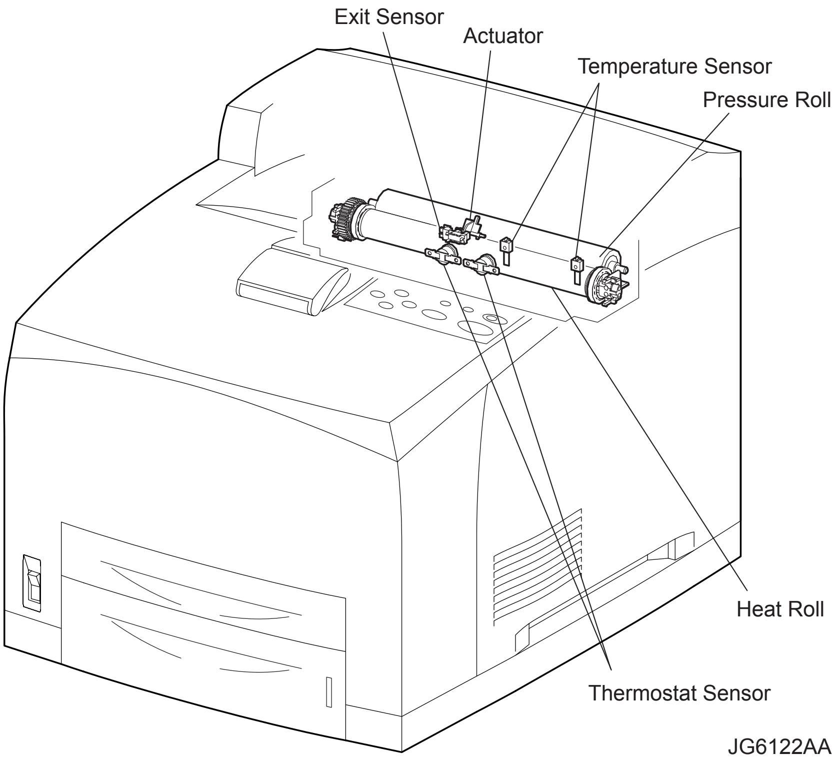
Heat Roll Diode

The negative charge accumulated on the Heat Roll may deteriorate the toner image on the paper during fixing. The Heat Roll Diode discharges the charge to the frame ground.

Exit Sensor

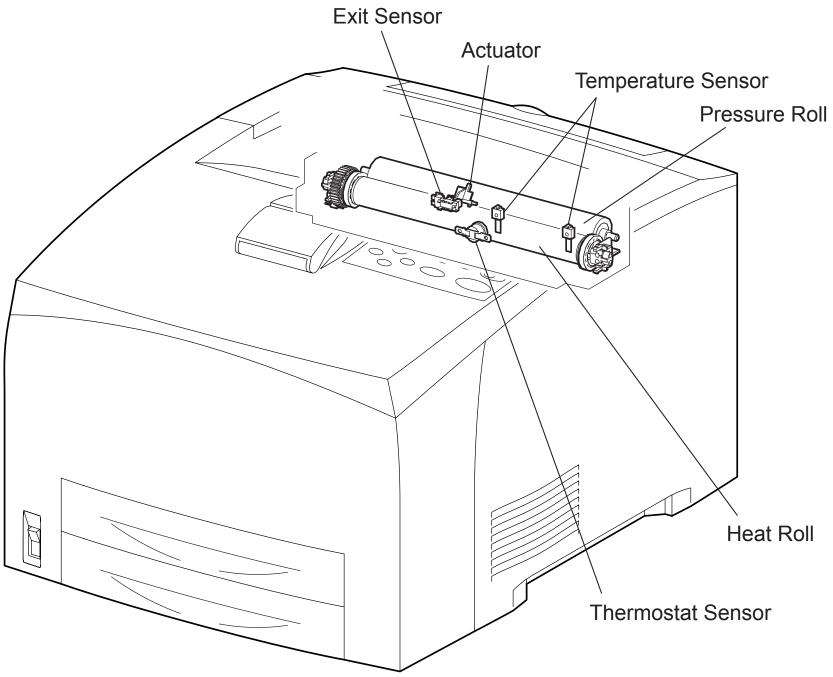
This sensor detects the arrival of the paper at a detection point in the exit area positioned behind the Fuser. This sensor also detects the discharge of the paper from this point. When the sensor receives light (i.e., paper is present), /EXIT goes Low.

- 34PPM


Exit Sensor
Actuator
Temperature Sensor
Pressure Roll
Heat Roll
Thermostat Sensor

JG6122AA

- 24PPM


Exit Sensor
Actuator
Temperature Sensor
Pressure Roll
Heat Roll
Thermostat Sensor

JG6022AA

5.5 500 Paper Exit & Option Face Up Tray / 250 Paper Exit

500 Paper Exit and 250 Paper Exit are components for discharging the printed paper out of the printer. 500 Paper Exit enables Face-Up output to the Option Face Up Tray(mounted on the rear surface of the machine), and output to Option OCT as well as Face-Down output.

MOTOR ASSY EXIT

This motor drives the ROLL EXIT that conveys paper to each output tray. If the optional DUPLEX is installed, this motor has also a function of reversing and inserting paper into the Duplex.

ROLL EXIT

This roll transports the printed paper sent out from the Fuser, to the Face-Down output tray.

ROLL FU

This roll discharges the printed paper sent out from the Fuser, to the Face-Up output tray.

SENSOR FACE UP OPEN

This sensor detects that the Face-Up print has been selected. If the LEVER GATE FU is raised, a signal is detected by the Actuator attached to the interlocking GATE FU, and the Face-Up print mode is set.

SENSOR FULL STACK

This sensor detects that the 500 Exit Face-Down output tray is full, using the ACTUATOR FULL STACK.

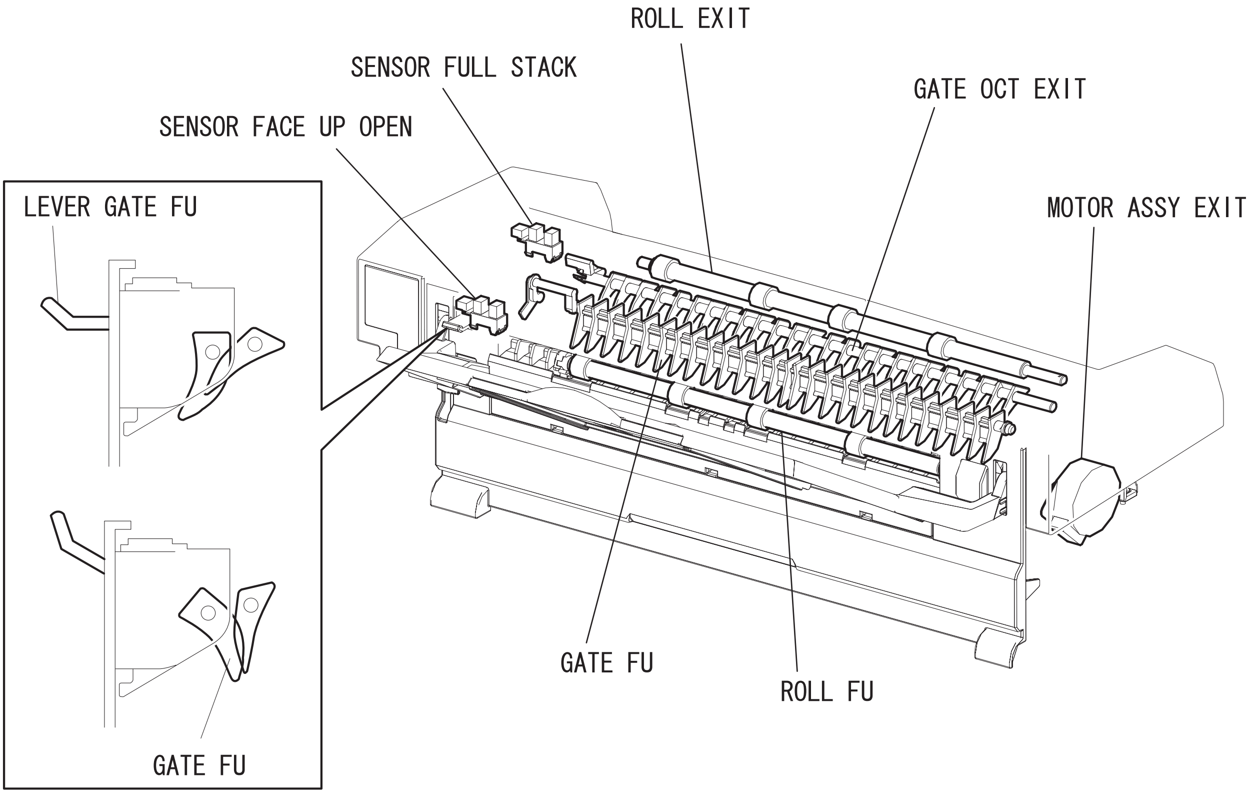
GATE FU

This gate switches the paper transport path interlocking with the LEVER GATE FU. When the LEVER GATE FU is raised, the GATE FU blocks the normal paper output path and switches the output direction to the Face-Up output tray.

GATE OCT EXIT

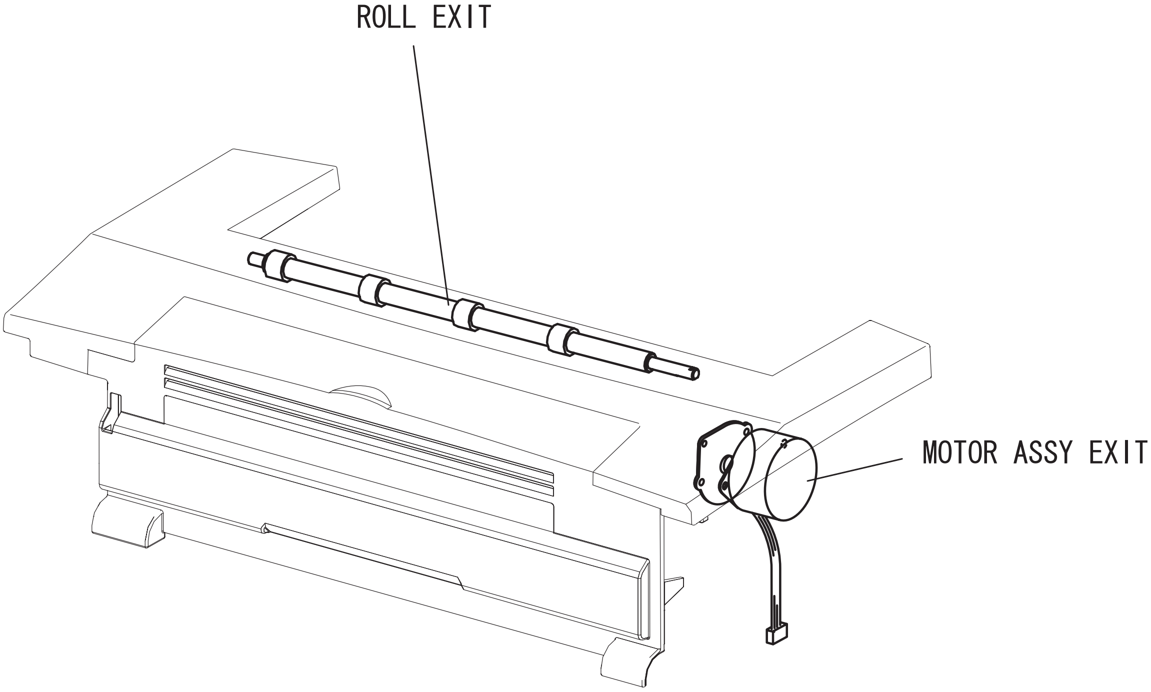
This gate switches the paper transport path interlocking with the LINK GATE OCT. When the SOLENOID ASSY GATE installed in the optional OCT operates, the LINK GATE OCT pushed down by the spindle of the SOLENOID ASSY GATE blocks the normal paper output path and switches the output direction to the OCT output tray .

● 500 Paper Exit & Option Face Up Tray


ROLL EXIT
SENSOR FULL STACK
GATE OCT EXIT
SENSOR FACE UP OPEN
LEVER GATE FU
MOTOR ASSY EXIT
GATE FU
ROLL FU
GATE FU

JG6123AA

● 250 Paper Exit


ROLL EXIT
MOTOR ASSY EXIT

JG6023AA

5.6 Drive

GEAR ASSY HOUSING

This housing is composed of gears for transmitting power from the MAIN MOTOR that drives the printer body to various portions of the printer.

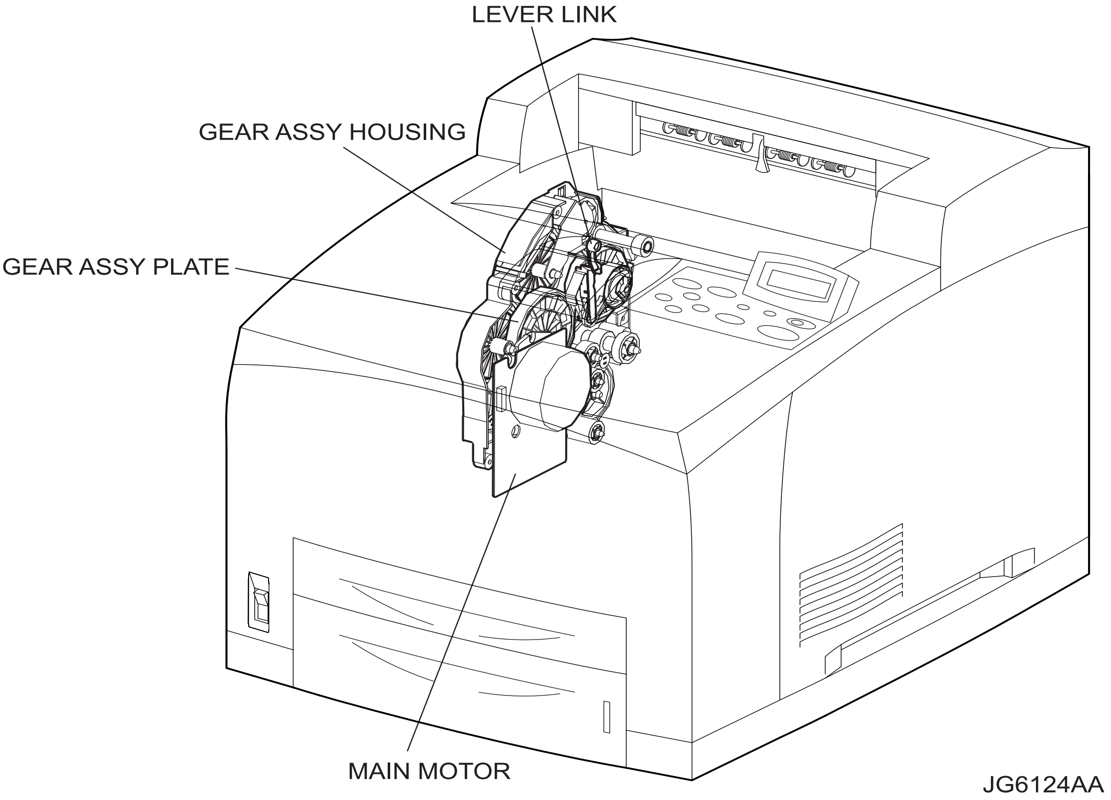
GEAR ASSY PLATE

This transmits power from the MAIN MOTOR to the EP CARTRIDGE.

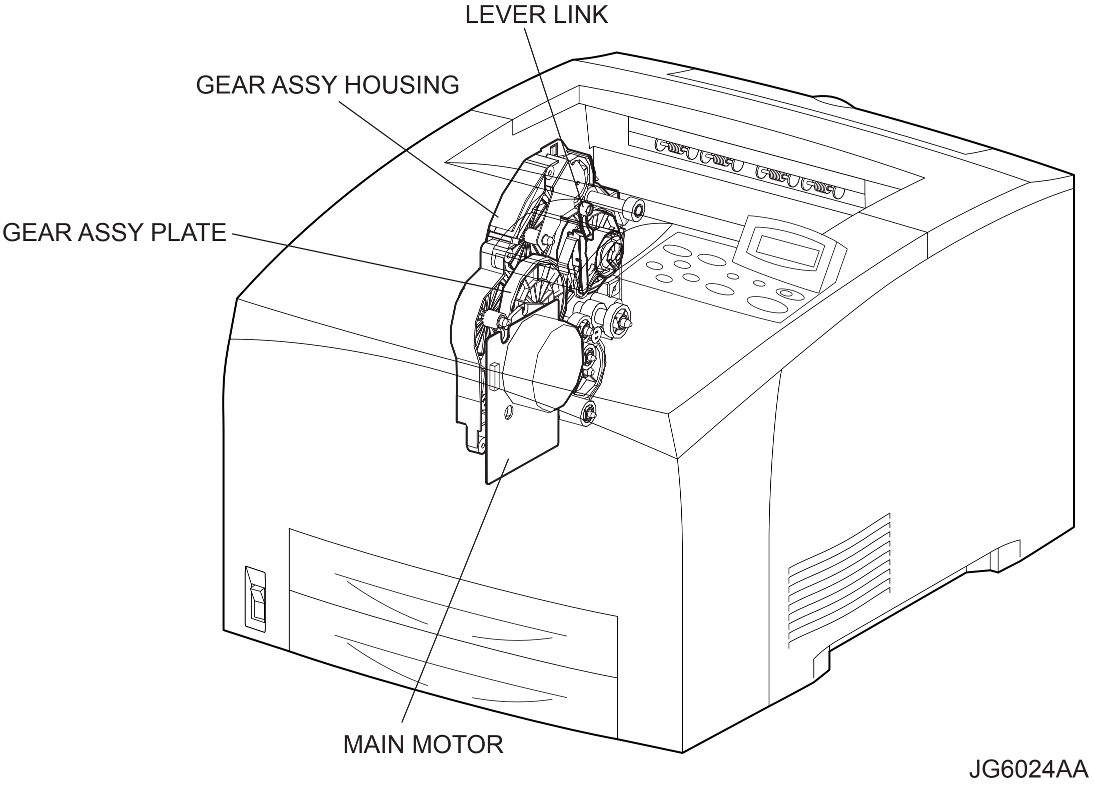
LEVER LINK

This connects and disconnects the power from the MAIN MOTOR to the FUSER ASSY. When the COVER OPEN is opened, the LEVER LINK pushes up the Gear 8 in the GEAR ASSY HOUSING, and disconnects the GEAR 9. Thus, the power path to the FUSER ASSY is disconnected. As the LEVER LINK moves up and down, the Gear 4 in the GEAR ASSY PLATE moves right and left via the LINK GEAR 3, and power to the Drum of the EP CARTRIDGE is connected or disconnected.

● 34PPM


LEVER LINK
GEAR ASSY HOUSING
GEAR ASSY PLATE
MAIN MOTOR
JG6124AA

● 24PPM


LEVER LINK
GEAR ASSY HOUSING
GEAR ASSY PLATE
MAIN MOTOR
JG6024AA

5.7 Electrical

INTERLOCK S/W 24V

This safety switch cuts off a 24 VDC power supply from the LVPS to the HVPS/MCU and MAIN MOTOR when the COVER OPEN is open.

INTERLOCK S/W 5V

This safety switch cuts off a 5 VDC power supply from the LVPS to the LD Assembly of the ROS ASSY when the COVER OPEN is open.

INTERLOCK S/W REAR

This safety switch interrupts a 24 VDC power supply from the LVPS to the HVPS/MCU and MAIN MOTOR when the COVER REAR is open.

FAN MAIN

This vents air inside the printer to prevent an excessive rise in the inside temperature.

FAN SUB

This fan takes outside air into the printer to prevent an excessive rise in the inside temperature. This is mounted on the ROS ASSY in the center on the front side.

LVPS

This generates low DC voltages (5 V and 3 V for Logical Circuit, 5 V for Laser Diode, and 24 V for Motor and Clutch) from the AC power.

HVPS/MCU

The functions of the HVPS and MCU are incorporated in this substrate. The HVPS generates high AC and DC voltages and supplies them to the BCR (charging), Magnet Roll (development), BTR (transfer), and Detack Saw (peeling). The MCU controls the printing operation according to the information obtained through communications with the Print Controller and from sensors and switches.

PWBA ESS

This receives data from the Host Computer, performs printing, and controls the whole printer.

PWBA EXIT MOTOR

This controls the MOTOR ASSY EXIT according to a signal from the HVPS/MCU.

SWITCH I/L ASSY

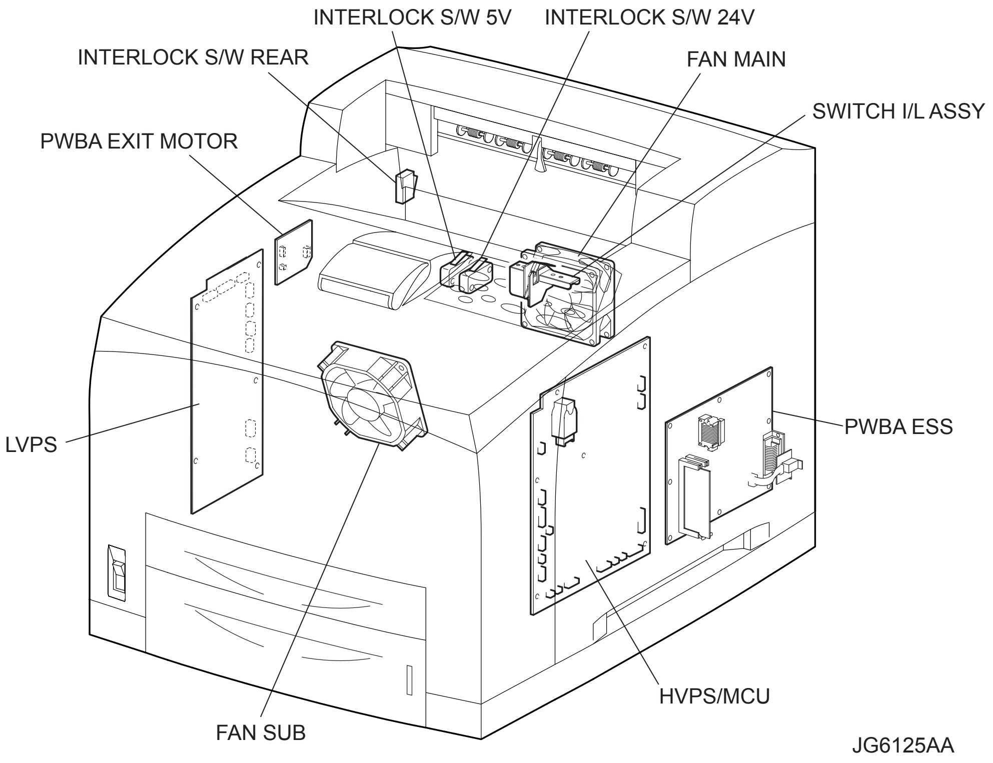
This assembly consists of the following two safety switches.

- Interlock S/W 5VR

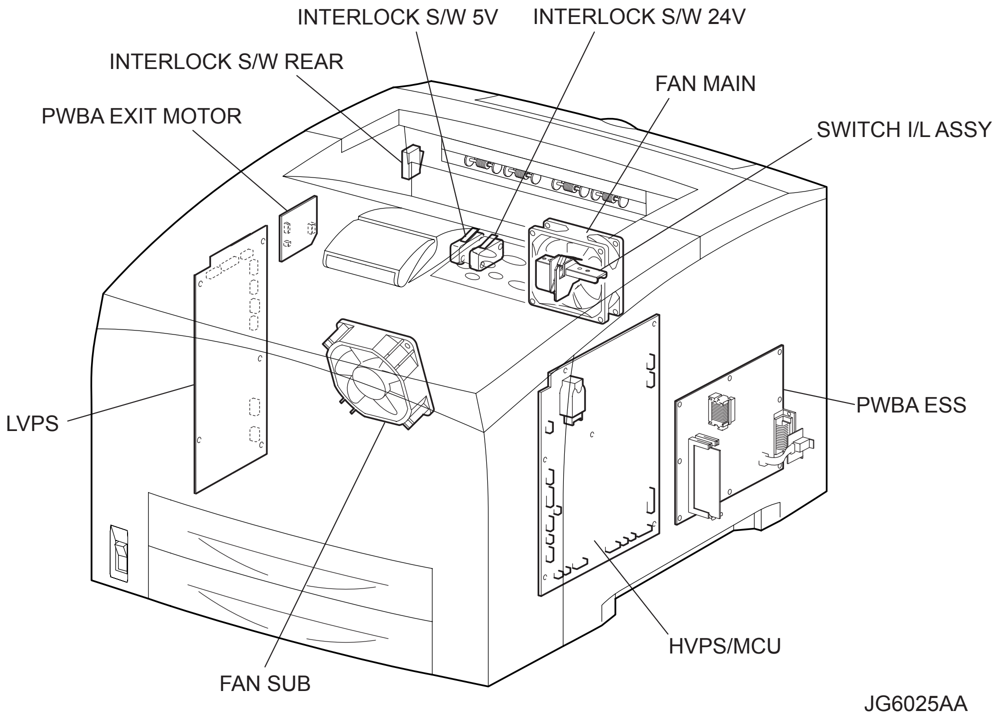
  This safety switch cuts off a 5 VDC power supply from the LVPS to the LD Assembly of the ROS ASSY when the COVER OPEN is open.
- Interlock S/W Front R

  This safety switch cuts off the INTERLOCK BEF (the signal indicating that the front cover is open) from the LVPS to the HVPS/MCU when the COVER OPEN is open.

- 34PPM


INTERLOCK S/W 5V
INTERLOCK S/W 24V
INTERLOCK S/W REAR
FAN MAIN
SWITCH I/L ASSY
PWBA EXIT MOTOR
PWBA ESS
LVPS
HVPS/MCU
FAN SUB
JG6125AA

- 24PPM


INTERLOCK S/W 5V
INTERLOCK S/W 24V
INTERLOCK S/W REAR
FAN MAIN
PWBA EXIT MOTOR
SWITCH I/L ASSY
PWBA ESS
LVPS
HVPS/MCU
FAN SUB
JG6025AA

6. Control

6.1 Control of Paper Size

6.1.1 Cassette Feeding (Paper Cassette)

The following table gives the states (ON(1) or OFF (0)) of the switches in the Size Switch, corresponding to the paper sizes of the Paper Cassette.

NOTE

The switches in the Size Switch are denoted by "SW1", "SW2", "SW3", and "SW4", respectively, from the front side.

Paper size	Size Switch			
	SW1	SW2	SW3	SW4
No cassette	0	0	0	0
Executive SEF	0	0	0	1
B5(JIS) SEF	0	0	1	1
A5 SEF	0	1	0	1
Legal14"SEF	0	1	1	1
Letter SEF	1	0	0	1
A4 SEF	1	1	0	1
Legal13"SEF	1	1	1	1

6.2 ROS Control

6.2.1 Rotation of Scanner Motor

The control (ON/OFF) of the rotation of the Scanner Motor is performed as shown below according to the mode of operation.

Mode of operation	ON/OFF of rotation of Scanner Motor
Standby state	Kept OFF.
Printing state	Turned on by receiving signal from the Controller, and turned off after 10 s since end of printing.
Power-saving state	Kept OFF.

The following table gives the resolution that differs according to the specifications of the machine, and the corresponding rotational speeds of the Scanner Motor.

Type	Process Speed	Resolution	RPM of Scanner	CLK signal frequency
34PPM	204mm/s	600dpi	24,094.49rpm	2,049.449Hz
		1200dpi	24,094.49rpm	2,049.449Hz
24PPM	141mm/s	600dpi	33,307.09rpm	3,300.708Hz
		1200dpi	33,307.09rpm	3,300.708Hz

dpi (dot per inch)
rpm (revolutions per minute)

Reference ***Each facet of the Polygon Mirror (12 facets for 34PPM, and 6 facets for 24PPM) is scanned with a laser beam.***

6.2.2 Warm-up of ROS

The Scanner Motor rotates simultaneously with the warm-up of the ROS. The SOS signal is sampled at intervals of 100 ms. If the obtained value is shorter than the Ready reference value three consecutive times, the warm-up of the ROS is ended (The Scanner Motor is rotating at a constant speed).

6.2.3 ROS Reference Value

ROS reference value	Descrption
Ready reference value	SOS signal interval corresponding to less than 98% of the specified rotational speed of the Scanner Motor
Fail reference value	SOS signal interval corresponding to less than 90% of the specified rotational speed of the Scanner Motor

Reference ***If the speed of the Scanner Motor increases by more than 1%, the laser beam does not enter the SOS Sensor, and "U2" is detected in terms of Fail reference value.***

6.3 Fuser Control

6.3.1 Fuser Control

The Halogen Lamp is controllably turned ON and OFF, based on the Fuser control temperature.
At the start of warm-up and when the MAIN MOTOR is at rest, the standby temperature is taken as the Fuser control temperature. When the MAIN MOTOR is operating except at warm-up, the running temperature is taken as the Fuser control temperature.

6.3.2 ON/OFF Control of Halogen Lamp

The Halogen Lamp is controllably turned ON and OFF to maintain the Fuser control temperature.

6.3.3 Warm-up of Fuser

The Halogen Lamp is lit up (turned ON) simultaneously with the start of warm-up of the Fuser. When the temperature of the HEAT ROLL surface (detected temperature of THERMISTER) reaches the Fuser control temperature (standby temperature), the warm-up of the Fuser is ended.
During warm-up of the Fuser, the MAIN MOTOR is in operation.

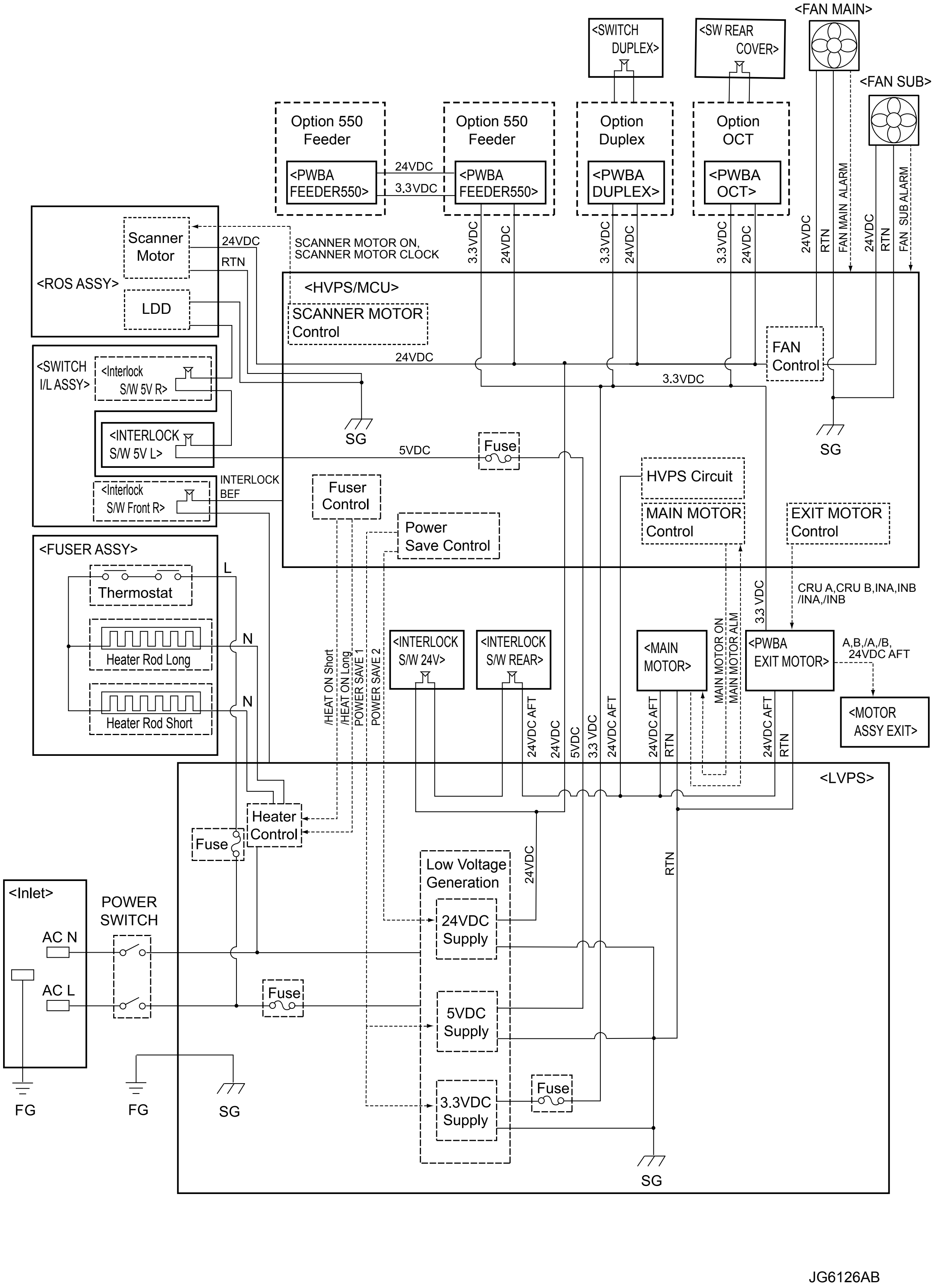
6.3.4 Fuser Temperature in Ready State

180 to 185°C in Ready (standby) state (During operation, it is higher than 185°C.)

6.3.5 Fuser Temperature when Abnormal Temperature (higher or lower) is Detected

Higher temperature: 250°C
Lower temperature: 130°C

7. Schematic Diagram of Safety System


<FAN MAIN>
<SWITCH DUPLEX>
<SW REAR COVER>
<FAN SUB>
Option 550 Feeder
<PWBA FEEDER550>
24VDC
3.3VDC
Option 550 Feeder
<PWBA FEEDER550>
Option Duplex
<PWBA DUPLEX>
Option OCT
<PWBA OCT>
Scanner Motor
<ROS ASSY>
LDD
24VDC
RTN
SCANNER MOTOR ON,
SCANNER MOTOR CLOCK
3.3VDC
24VDC
3.3VDC
24VDC
3.3VDC
24VDC
24VDC
RTN
FAN MAIN ALARM
24VDC
RTN
FAN SUB ALARM
<HVPS/MCU>
SCANNER MOTOR Control
24VDC
FAN Control
3.3VDC
<SWITCH I/L ASSY>
<Interlock S/W 5V R>
<INTERLOCK S/W 5V L>
<Interlock S/W Front R>
SG
SG
5VDC
Fuse
INTERLOCK BEF
Fuser Control
HVPS Circuit
Power Save Control
MAIN MOTOR Control
EXIT MOTOR Control
<FUSER ASSY>
L
Thermostat
N
Heater Rod Long
N
Heater Rod Short
CRU A,CRU B,INA,INB /INA,/INB
3.3 VDC
<INTERLOCK S/W 24V>
<INTERLOCK S/W REAR>
<MAIN MOTOR>
MAIN MOTOR ON
MAIN MOTOR ALM
<PWBA EXIT MOTOR>
A,B,/A,/B, 24VDC AFT
<MOTOR ASSY EXIT>
/HEAT ON Short
/HEAT ON Long
POWER SAVE 1
POWER SAVE 2
24VDC AFT
24VDC
5VDC
3.3 VDC
24VDC AFT
24VDC AFT
RTN
24VDC AFT
RTN
<LVPS>
Heater Control
Fuse
24VDC
RTN
Low Voltage Generation
24VDC Supply
5VDC Supply
3.3VDC Supply
Fuse
<Inlet>
POWER SWITCH
AC N
AC L
Fuse
FG
FG
SG
SG
JG6126AB

Chapter 7 Wiring Diagrams and Signal Information CONTENTS

1. Connection Wiring Diagram..7 - 1

1.1 Symbols in the General Connection Wiring Diagram..7 - 1

1.2 General Wiring Diagram..7 - 2

2. Interconnection Wiring Diagram of Parts..7 - 3

2.1 Instructions for the Use of the Interconnection Wiring Diagram of Parts..7 - 3

2.2 Configuration of the Interconnection Wiring Diagram of Parts..7 - 5

§ 1 INTERLOCK S/W 24V, INTERLOCK S/W REAR, MAIN MOTOR, FAN SUB, MOTOR ASSY EXIT..7 - 6

§ 2   FUSER ASSY, POWER SWITCH..7 - 8

§ 3   EP Cartridge, BTR ASSY..7 - 9

§ 4 150 Paper Feeder, 250/550 Paper Feeder, FAN MAIN..7 - 10

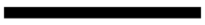
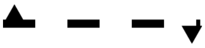
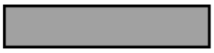
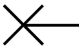
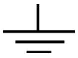
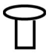
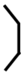
§ 5   ROS ASSY, INTERLOCK S/W 5V, SWITCH I/L ASSY..7 - 12

§ 6 500 Paper Exit..7 - 14

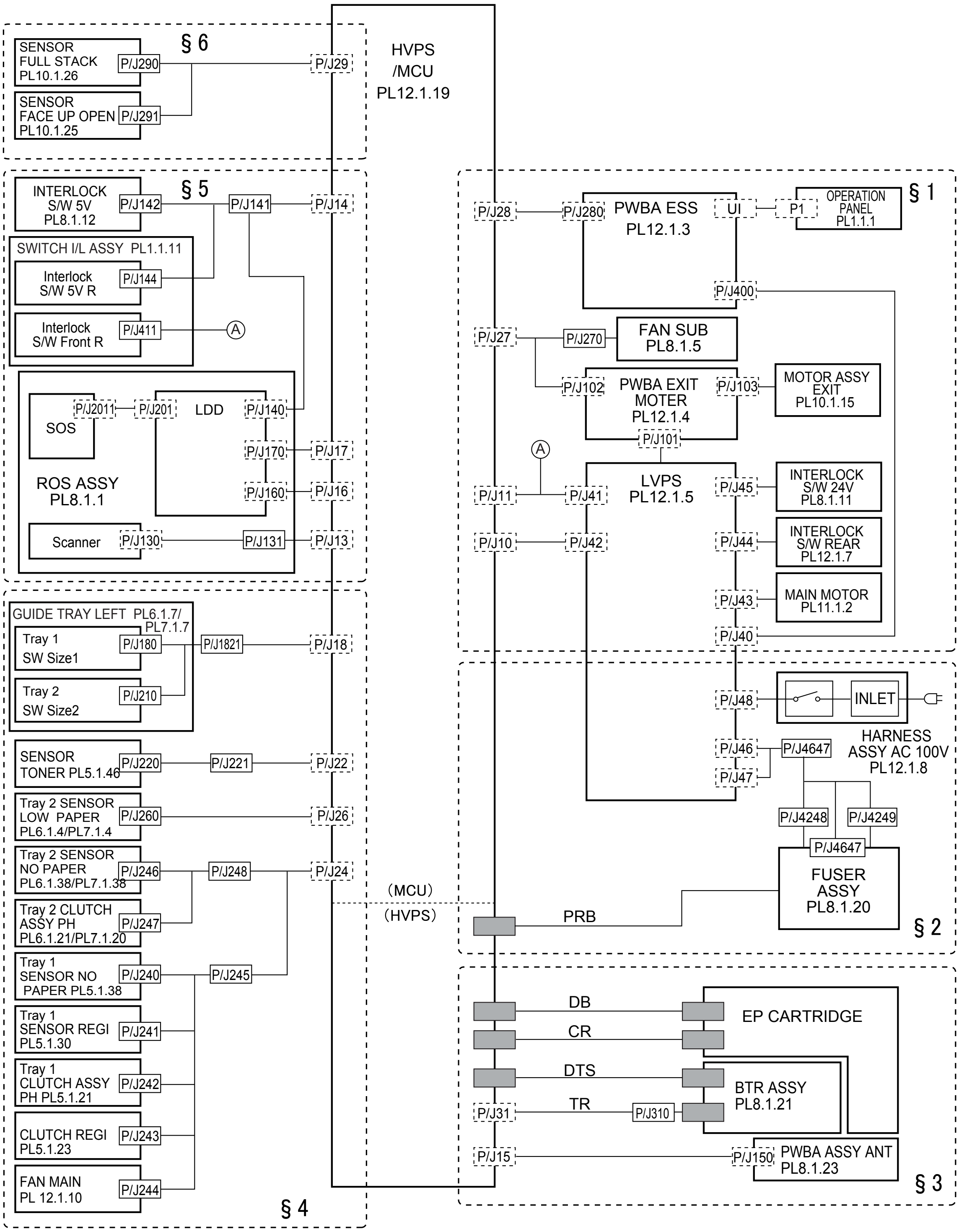
1. Connection Wiring Diagram

1.1 Symbols in the General Connection Wiring Diagram

The symbols in the general connection wiring diagram are described below.

Symbol	Description
	Represents an interconnection between parts using wiring harness or wire.
	Represents an interconnection which differs according to the specifications.
	Represents an interconnection between parts using a conductive member such as a plate spring.
	Represents a connection between parts by tightening of a screw.
	Indicates a frame ground.
P/J X X	Represents a connector. The connector No. is indicated inside the box.
JP X X	Represents a connection terminal with a plate spring on the printed circuit board. The connector (terminal) No. is indicated inside the box.
P X X	Represents a connector directly connected to the printed circuit board. The connector No. is indicated inside the box.
POWER SUPPLY A PL X.Y.Z	The box containing a part name represents a part. "PL X.Y.Z" indicates the item "Z" of the plate (PL) "X.Y" described in Chapter 5 "Parts List."
Main Motor	Represents a functional part within a part, and indicates the name of the functional part.
§ 1	Represents a section in "2. Interconnection Wiring Diagram of Parts," and indicates its section No.
	Represents a screw for fixing wiring harness and a conductive member such as a plate spring.
	Represents a conductive member such as a plate spring.

1.2 General Wiring Diagram

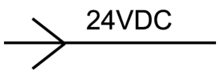
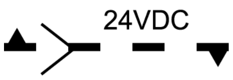
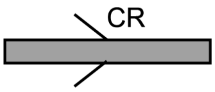
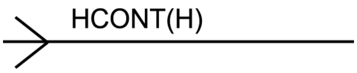
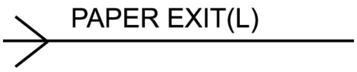
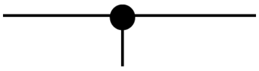
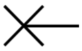
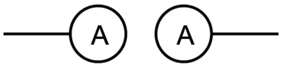
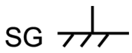
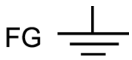

HVPS
/MCU
PL12.1.19
§ 6
SENSOR
FULL STACK
PL10.1.26
P/J290
P/J29
SENSOR
FACE UP OPEN
PL10.1.25
P/J291
§ 5
INTERLOCK
S/W 5V
PL8.1.12
P/J142
P/J141
P/J14
SWITCH I/L ASSY PL1.1.11
Interlock
S/W 5V R
P/J144
Interlock
S/W Front R
P/J411
A
SOS
P/J2011
P/J201
LDD
P/J140
P/J170
P/J17
ROS ASSY
PL8.1.1
P/J160
P/J16
Scanner
P/J130
P/J131
P/J13
GUIDE TRAY LEFT PL6.1.7/
PL7.1.7
Tray 1
SW Size1
P/J180
P/J1821
P/J18
Tray 2
SW Size2
P/J210
SENSOR
TONER PL5.1.46
P/J220
P/J221
P/J22
Tray 2 SENSOR
LOW PAPER
PL6.1.4/PL7.1.4
P/J260
P/J26
Tray 2 SENSOR
NO PAPER
PL6.1.38/PL7.1.38
P/J246
P/J248
P/J24
Tray 2 CLUTCH
ASSY PH
PL6.1.21/PL7.1.20
P/J247
Tray 1
SENSOR NO
PAPER PL5.1.38
P/J240
P/J245
Tray 1
SENSOR REGI
PL5.1.30
P/J241
Tray 1
CLUTCH ASSY
PH PL5.1.21
P/J242
CLUTCH REGI
PL5.1.23
P/J243
FAN MAIN
PL 12.1.10
P/J244
§ 4
（MCU）
（HVPS）
§ 1
P/J28
P/J280
PWBA ESS
PL12.1.3
UI
P1
OPERATION
PANEL
PL1.1.1
P/J400
P/J27
P/J270
FAN SUB
PL8.1.5
P/J102
PWBA EXIT
MOTER
PL12.1.4
P/J103
MOTOR ASSY
EXIT
PL10.1.15
P/J101
A
P/J11
P/J41
LVPS
PL12.1.5
P/J45
INTERLOCK
S/W 24V
PL8.1.11
P/J10
P/J42
P/J44
INTERLOCK
S/W REAR
PL12.1.7
P/J43
MAIN MOTOR
PL11.1.2
P/J40
P/J48
INLET
P/J46
P/J4647
HARNESS
ASSY AC 100V
PL12.1.8
P/J47
P/J4248
P/J4249
P/J4647
FUSER
ASSY
PL8.1.20
PRB
§ 2
DB
EP CARTRIDGE
CR
DTS
BTR ASSY
PL8.1.21
P/J31
TR
P/J310
P/J15
P/J150
PWBA ASSY ANT
PL8.1.23
§ 3

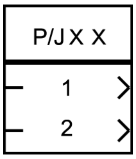
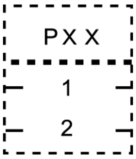
JG7001AA

2. Interconnection Wiring Diagram of Parts

2.1 Instructions for the Use of the Interconnection Wiring Diagram of Parts

The symbols in the interconnection wiring diagram of parts are described below.
Note that the description of general symbols is omitted.

Symbol	Description
	Represents an interconnection between parts using wiring harness or wire, and indicates its signal name/contents. The arrow ">" or "<" on the line represents the direction of the signal.
	Represents an interconnection between parts using wiring harness or wire, which differs according to the specifications, and indicates its signal name/contents. The arrow ">" or "<" on the line represents the direction of the signal.
	Represents a interconnection between parts using a conductive member such as a plate spring, and indicates its signal name/ contents. The arrow ">" or "<" on the line represents the direction of the signal.
	Represents a function and a logical value (High (H) or Low (L)) of a signal when the function is activated. The voltage indicates a value when the signal is High. The arrow indicates the direction of the signal.
	Represents a function and a logical value (High (H) or Low (L)) of a signal when the function is in a detectable state. The voltage indicates a value when the signal is High. The arrow indicates the direction of the signal.
	Represents a connection between lead wires.
	Represents a connection between parts by tightening of a screw.
	Represents a connection between "A" and "A".
24VDC	The DC voltage indicates an approximate value measured when the negative side is connected to a signal ground (SG).
	Indicates a signal ground (SG).
	Indicates a frame ground (FG).

Symbol	Description
RTN	Indicates a return.
	Represents a connector. The connector and PIN Nos. are shown at the upper and lower parts respectively. "P,-" indicates the plug side of the connector. "J,>" indicates the jack side of the connector.
JP X X	Represents a connection terminal with a plate spring on the printed circuit board. The connector No. is indicated inside the box.
	Represents a connector directly connected to the printed circuit board. The connector No. is indicated inside the box.
POWER SUPPLY A PL X.Y.Z	Represents a part. "PL X.Y.Z" indicates the item "Z" of the plate (PL) "X.Y" described in Chapter 5 "Parts List."
Scanner Assy	Represents a functional part within a part, and indicates the name of the functional part.
◆	Indicates a reference item associated with the section.

2.2 Configuration of the Interconnection Wiring Diagram of Parts

The interconnection wiring diagram is divided into 6 sections. § 1 to § 6 indicate details of the interconnections of parts.

§ 1 INTERLOCK S/W 24V, INTERLOCK S/W REAR, MAIN MOTOR, FAN SUB, MOTOR ASSY EXIT
- Connections of INTERLOCK S/W 24V and INTERLOCK S/W REAR with LVPS
- Connections of MAIN MOTOR with LVPS
- Connections of FAN SUB with HVPS/MCU
- Connections of MOTOR ASSY EXIT with PWBA EXIT MOTOR
- Connections of HVPS/MCU with LVPS, PWBA EXIT MOTOR and PWBA ESS

§ 2 FUSER ASSY, POWER SWITCH
- Connections of FUSER ASSY with LVPS and GUIDE ASSY CRU R
- Connections of POWER SWITCH with LVPS

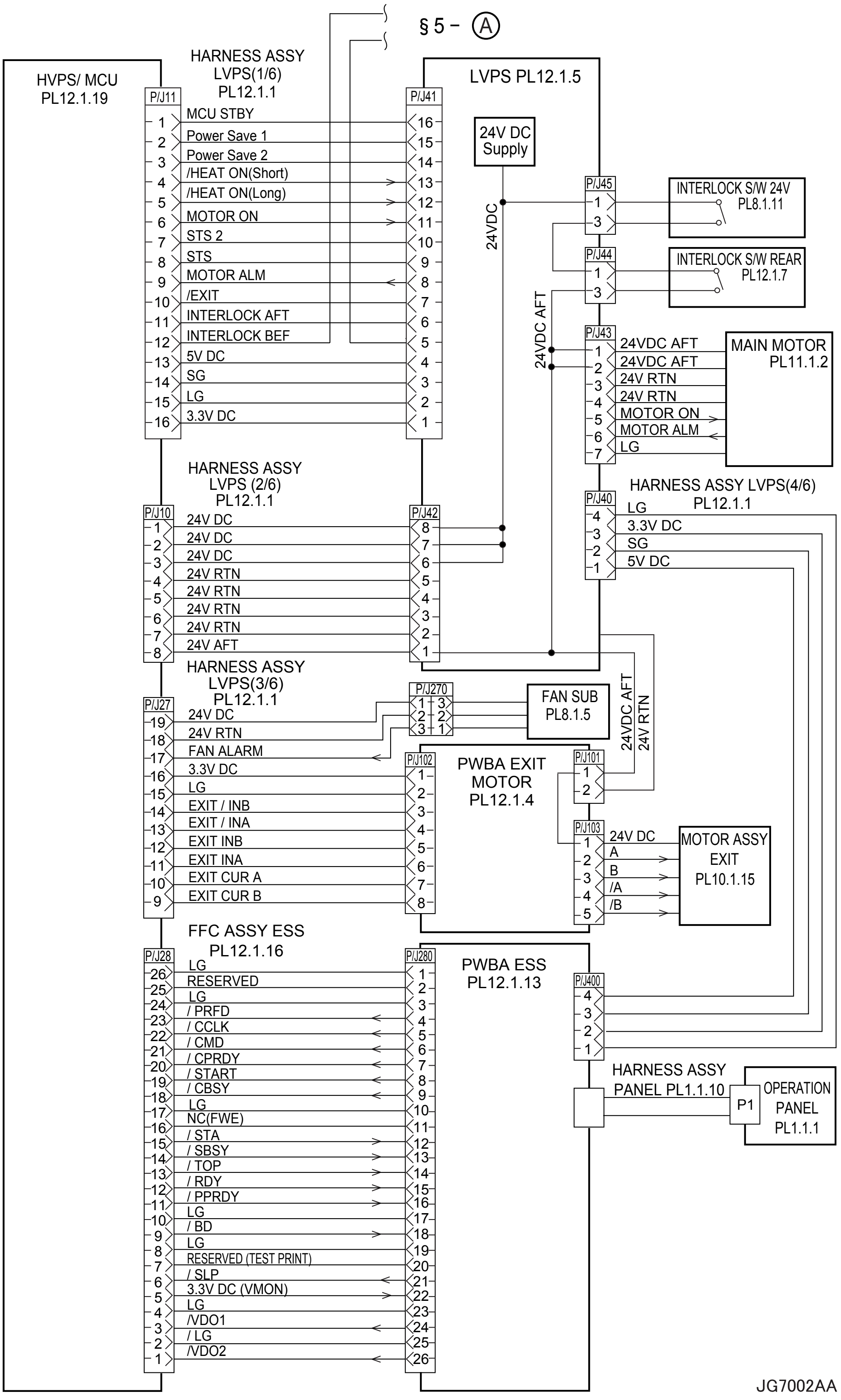
§ 3 EP Cartridge, BTR ASSY
- Connections of EP Cartridge with GUIDE ASSY CRU R
- Connections of BTR ASSY with GUIDE ASSY CRU R
- Connections of PWBA ASSY ANT with HVPS/MCU
- Connections of GUIDE ASSY CRU R with HVPS/MCU

§ 4 150 Paper Feeder, 550 Paper Feeder, FAN MAIN
- Connections of GUIDE TRAY L ASSY with HVPS/MCU
- Connections of Tray1 SENSOR NO PAPER with HVPS/MCU
- Connections of SENSOR REGI with HVPS/MCU
- Connections of Tray1 CLUTCH ASSY PH with HVPS/MCU
- Connections of CLUTCH REGI with HVPS/MCU
- Connections of Tray2 SENSOR LOW PAPER with HVPS/MCU
- Connections of Tray2 SENSOR NO PAPER with HVPS/MCU
- Connections of Tray2 CLUTCH ASSY PH with HVPS/MCU
- Connections of FAN MAIN with HVPS/MCU
- Connections of SENSOR TONER with HVPS/MCU

§ 5 ROS ASSY, INTERLOCK S/W 5V, SWITCH I/L ASSY
- Connections of ROS ASSY with HVPS/MCU
- Connections of INTERLOCK S/W 5V with HVPS/MCU
- Connections of SWITCH I/L ASSY with HVPS/MCU

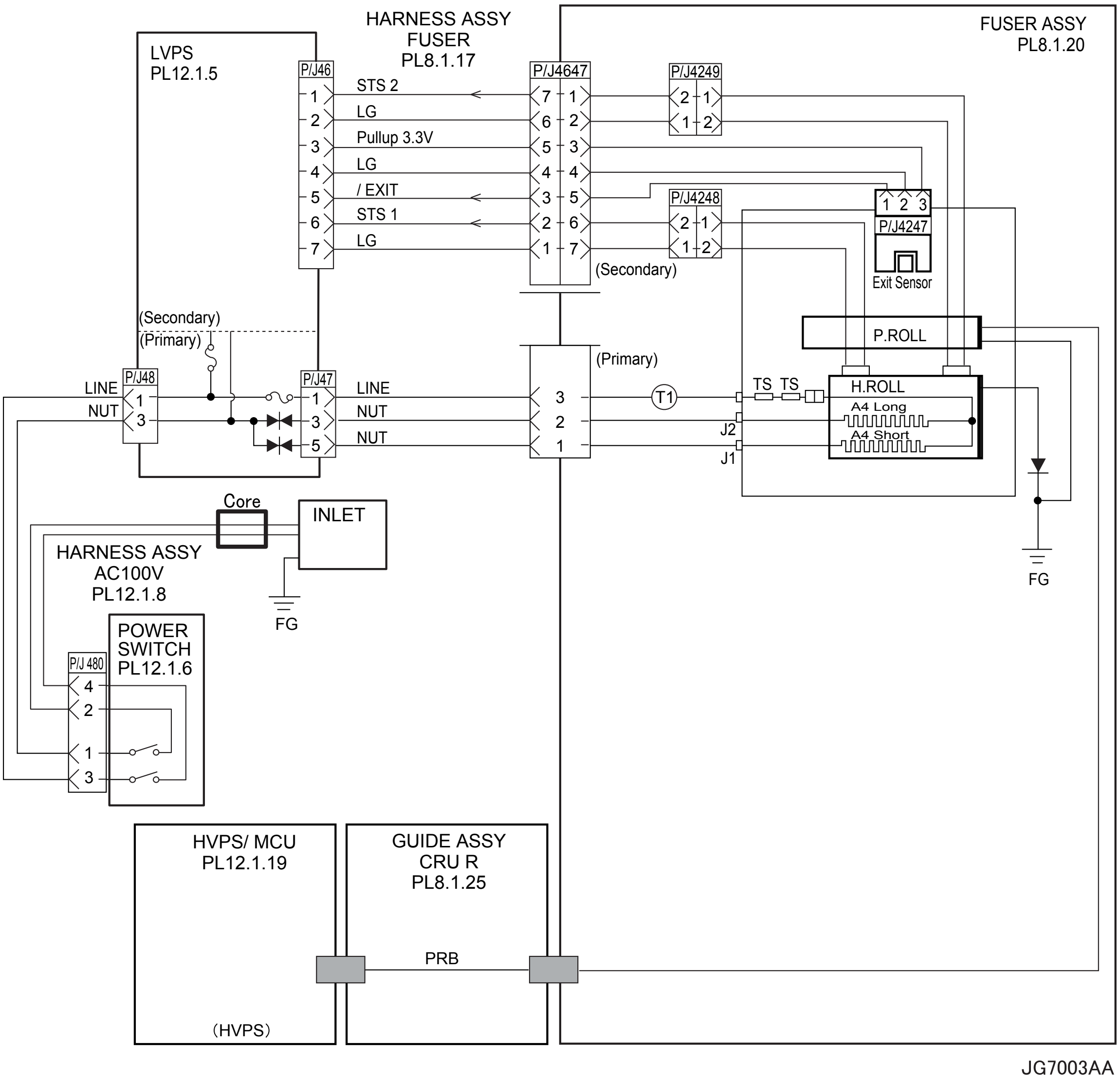
§ 6 500 Paper Exit
- Connections of HVPS/MCU with SENSOR FACE UP OPEN
- Connections of HVPS/MCU with SENSOR FULL STACK

§ 1 INTERLOCK S/W 24V, INTERLOCK S/W REAR, MAIN MOTOR, FAN SUB, MOTOR ASSY EXIT


§5 – Ⓐ
HVPS/ MCU PL12.1.19
HARNESS ASSY LVPS(1/6) PL12.1.1
P/J11
P/J41
MCU STBY
Power Save 1
Power Save 2
/HEAT ON(Short)
/HEAT ON(Long)
MOTOR ON
STS 2
STS
MOTOR ALM
/EXIT
INTERLOCK AFT
INTERLOCK BEF
5V DC
SG
LG
3.3V DC
LVPS PL12.1.5
24V DC Supply
24VDC
24VDC AFT
P/J45
INTERLOCK S/W 24V PL8.1.11
P/J44
INTERLOCK S/W REAR PL12.1.7
P/J43
24VDC AFT
24VDC AFT
24V RTN
24V RTN
MOTOR ON
MOTOR ALM
LG
MAIN MOTOR PL11.1.2
HARNESS ASSY LVPS (2/6) PL12.1.1
P/J10
P/J42
24V DC
24V DC
24V DC
24V RTN
24V RTN
24V RTN
24V RTN
24V AFT
HARNESS ASSY LVPS(4/6) PL12.1.1
P/J40
LG
3.3V DC
SG
5V DC
HARNESS ASSY LVPS(3/6) PL12.1.1
P/J27
P/J270
24V DC
24V RTN
FAN ALARM
FAN SUB PL8.1.5
3.3V DC
LG
EXIT / INB
EXIT / INA
EXIT INB
EXIT INA
EXIT CUR A
EXIT CUR B
P/J102
PWBA EXIT MOTOR PL12.1.4
P/J101
24VDC AFT
24V RTN
P/J103
24V DC
A
B
/A
/B
MOTOR ASSY EXIT PL10.1.15
FFC ASSY ESS PL12.1.16
P/J28
P/J280
LG
RESERVED
LG
/ PRFD
/ CCLK
/ CMD
/ CPRDY
/ START
/ CBSY
LG
NC(FWE)
/ STA
/ SBSY
/ TOP
/ RDY
/ PPRDY
LG
/ BD
LG
RESERVED (TEST PRINT)
/ SLP
3.3V DC (VMON)
LG
/VDO1
/ LG
/VDO2
PWBA ESS PL12.1.13
P/J400
HARNESS ASSY PANEL PL1.1.10
P1
OPERATION PANEL PL1.1.1
JG7002AA

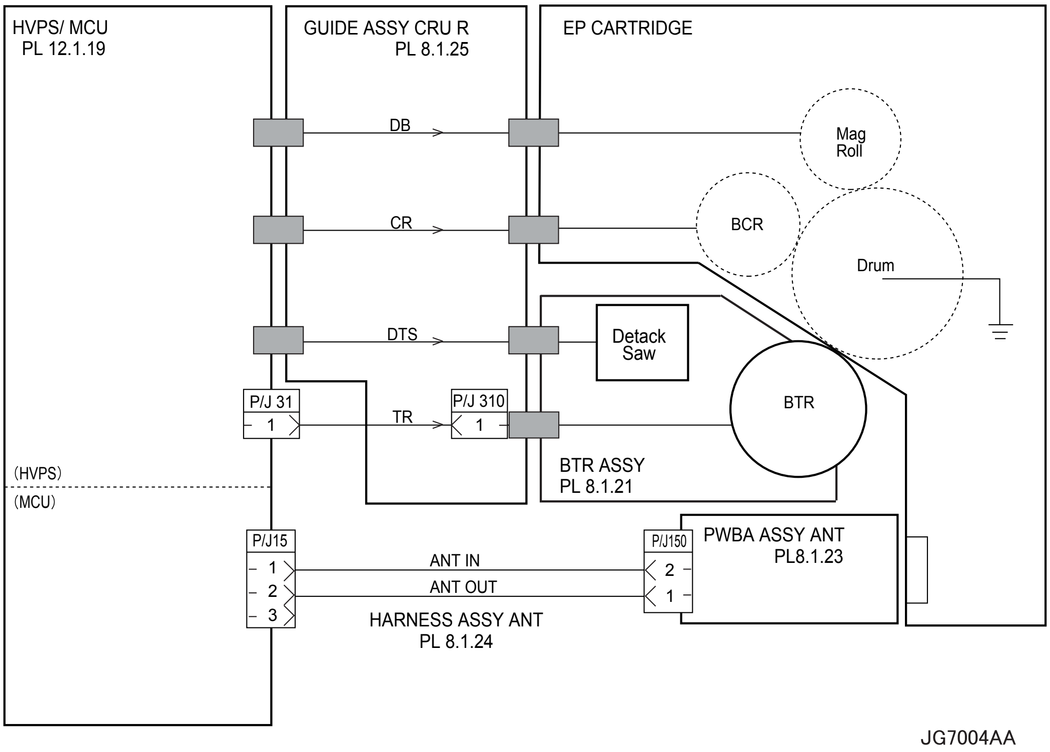
Signal line name	Description
/HEAT ON	AC power-supply control signal for Heater Rod. Low: ON/High: OFF
MOTOR ON	Control signal for MAIN MOTOR.
MOTOR ALM	Monitor signal for MAIN MOTOR.
INTERLOCK AFT	Signal indicating that the rear cover is open. This signal goes High when the front or rear cover is open.
INTERLOCK BEF	Signal indicating that the front cover is open. This signal goes High when the front cover is open.
FAN ALARM	FUN SUB monitor signal. If a trouble occurs, this signal goes High.
EXIT /INB	Excitation signal for EXIT MOTOR. Phase /B.
EXIT /INA	Excitation signal for EXIT MOTOR. Phase /A.
EXIT INB	Excitation signal for EXIT MOTOR. Phase B.
EXIT INA	Excitation signal for EXIT MOTOR. Phase A.
EXIT CUR A	Current-switching signal for EXIT MOTOR.
EXIT CUR B	Current-switching signal for EXIT MOTOR.
A and B	Current output to each winding of EXIT MOTOR. Phases A and B.
/A and /B	Current output to each winding of EXIT MOTOR. Phases $\overline{A}$ and $\overline{B}$.
/PRFD	Prefeed signal. This is effective only when /RDY is Low.
/CCLK	Clock signal. This is sent out simultaneously with /STA or /CMD.
/CMD	Command signal. When /CBSY is Low, it is sent out from the controller in synchronism with /CCLK.
/CPRDY	Ready signal for the controller power supply. This signal goes Low when the controller power supply is ON and, at the same time, initialization of the CPU is completed. When a trouble occurs with the CPU, the signal goes High.
/START	Print start signal. This is effective only when /RDY is Low.
/CBSY	Command busy signal. This goes Low when /CMD is sent out (except when /SBSY is Low or /PPRDY is High).
/STA	Status signal. Status is sent in synchronism with /CCLK when /SBSY is Low.
/SBSY	Status busy signal. This signal is Low when the printer is sending /STA (except when /CBSY is Low or /CPRDY is High).
/TOP	Vertical sync signal for image data. This is periodically sent out when ROS MOTOR is in operation.
/RDY	Ready signal. This signal is Low in a standby state where reception of / START is awaited.
/PPRDY	Ready signal for the printer power supply. This goes Low when the printer power supply is turned on and initialization of the CPU is completed. This signal goes High when the MCP detects an error.
/BD	Horizontal sync signal for image data. This is periodically sent out when ROS MOTOR is in operation.
/SLP	Control signal for LVPS. This goes Low in power saving mode.
/VDO1	Image data signal. This is sent out in synchronism with /TOP and /BD. This signal goes High (White) for other than effective data.
/VDO2	

§ 2 FUSER ASSY, POWER SWITCH


HARNESS ASSY
FUSER
PL8.1.17
FUSER ASSY
PL8.1.20
LVPS
PL12.1.5
P/J46
P/J4647
P/J4249
P/J4248
P/J4247
STS 2
LG
Pullup 3.3V
LG
/ EXIT
STS 1
LG
1 2 3
Exit Sensor
(Secondary)
(Secondary)
(Primary)
(Primary)
P.ROLL
P/J48
P/J47
LINE
NUT
LINE
NUT
NUT
T1
TS TS
H.ROLL
A4 Long
A4 Short
J2
J1
Core
INLET
HARNESS ASSY
AC100V
PL12.1.8
FG
FG
POWER
SWITCH
PL12.1.6
P/J 480
HVPS/ MCU
PL12.1.19
(HVPS)
GUIDE ASSY
CRU R
PL8.1.25
PRB
JG7003AA

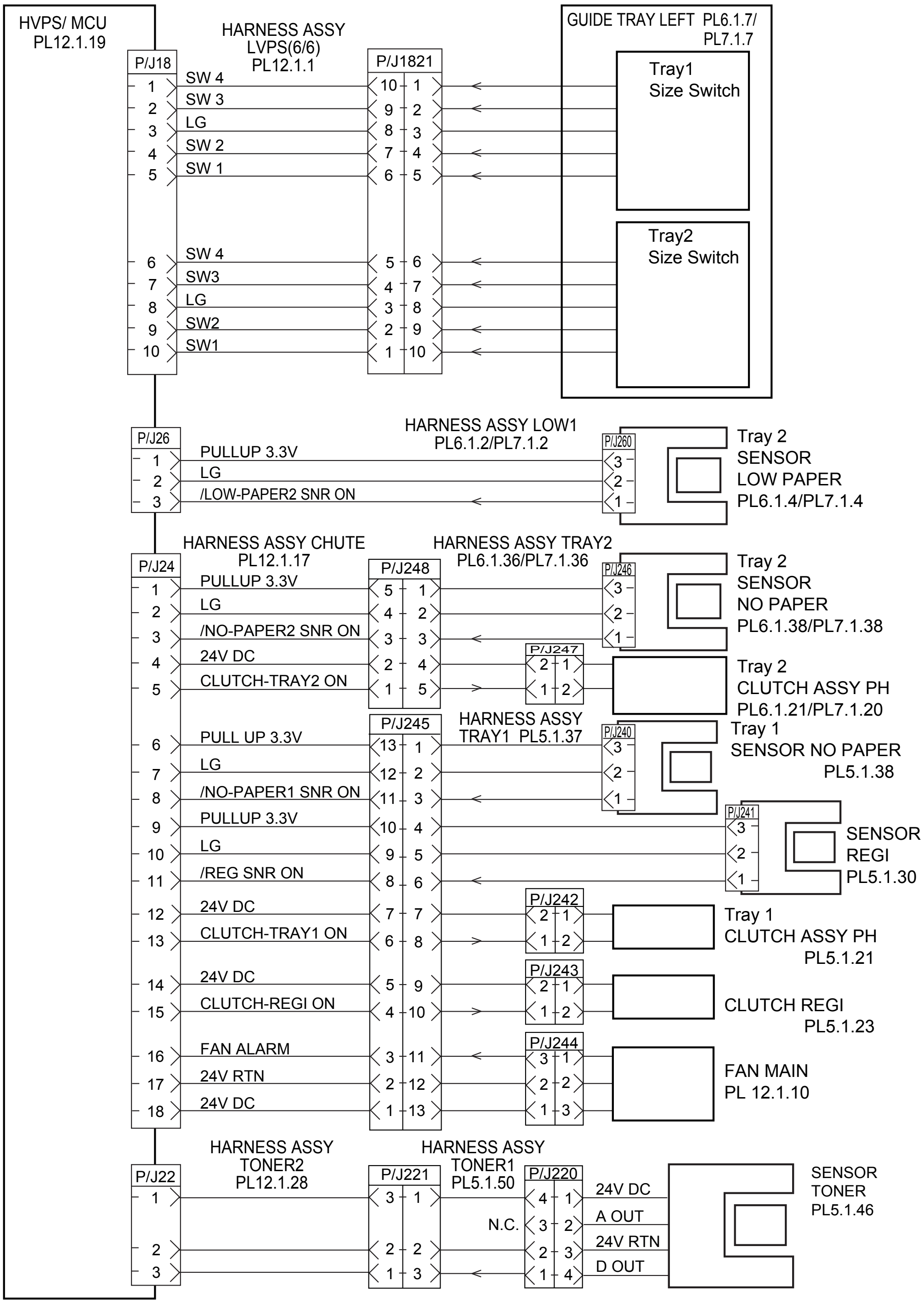
Signal line name	Description
/EXIT	Signal from Exit Sensor. This signal goes Low when light is received.
STS	Temperature monitor signal (analog signal) from Temperature Sensor (Thermistor). It detects the temperature on the surface of Heat Roll.
PRB	Output from HVPS which applies a high voltage to Pressure Roll.

§ 3 EP Cartridge, BTR ASSY


HVPS/ MCU
PL 12.1.19
GUIDE ASSY CRU R
PL 8.1.25
EP CARTRIDGE
DB
CR
DTS
TR
Mag Roll
BCR
Drum
Detack Saw
BTR
P/J 31
1
P/J 310
1
BTR ASSY
PL 8.1.21
(HVPS)
(MCU)
P/J15
1
2
3
ANT IN
ANT OUT
HARNESS ASSY ANT
PL 8.1.24
P/J150
2
1
PWBA ASSY ANT
PL8.1.23
JG7004AA

Signal line name	Description
DB	Output from HVPS to Mag Roll (Development bias)
CR	Output from HVPS to BCR
DTS	Output from HVPS to Detack Saw
TR	Output from HVPS to BTR

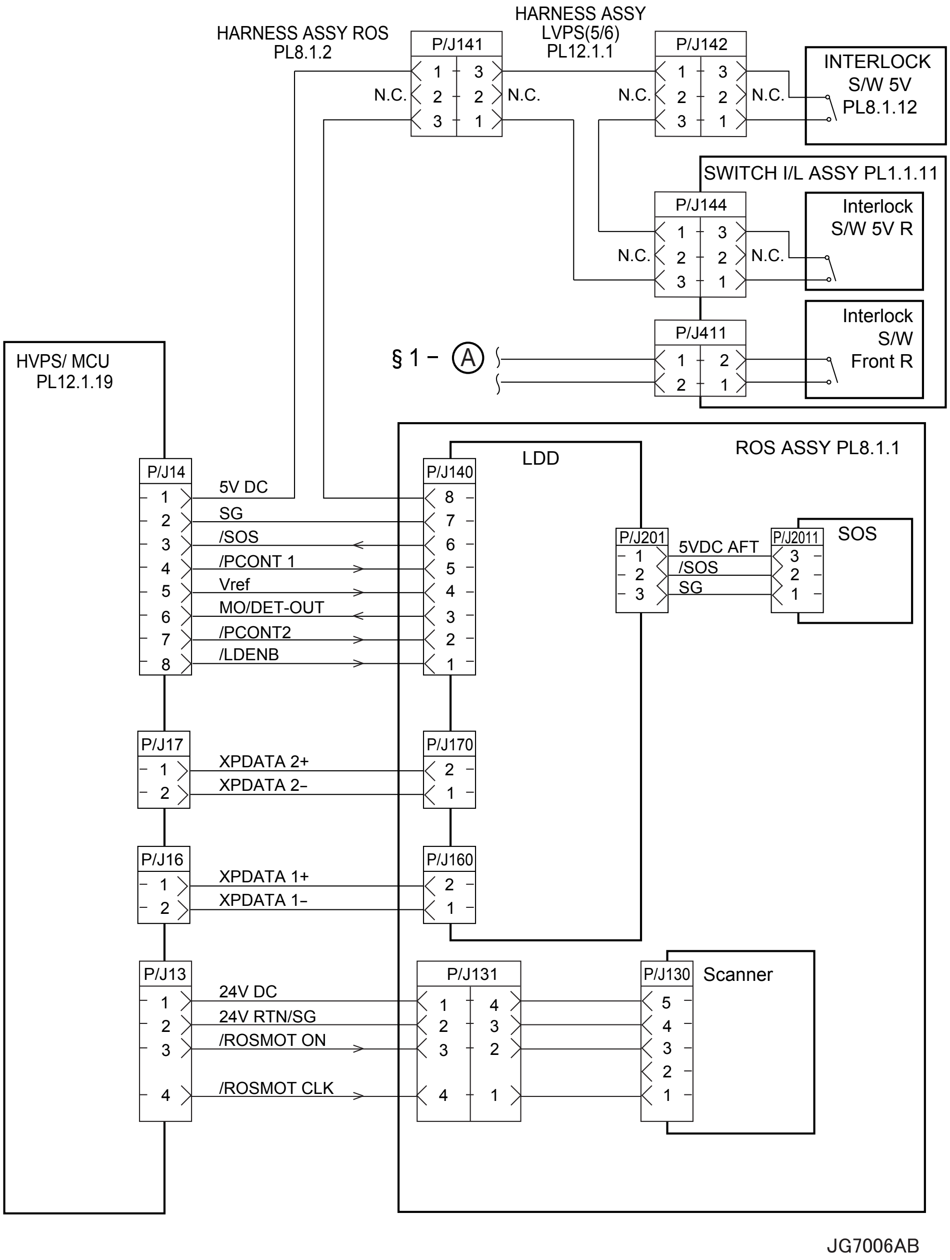
§ 4 150 Paper Feeder, 250/550 Paper Feeder, FAN MAIN


HVPS/ MCU
PL12.1.19
HARNESS ASSY
LVPS(6/6)
PL12.1.1
P/J18
P/J1821
SW 4
SW 3
LG
SW 2
SW 1
SW 4
SW3
LG
SW2
SW1
GUIDE TRAY LEFT PL6.1.7/
PL7.1.7
Tray1
Size Switch
Tray2
Size Switch
P/J26
PULLUP 3.3V
LG
/LOW-PAPER2 SNR ON
HARNESS ASSY LOW1
PL6.1.2/PL7.1.2
P/J260
Tray 2
SENSOR
LOW PAPER
PL6.1.4/PL7.1.4
HARNESS ASSY CHUTE
PL12.1.17
HARNESS ASSY TRAY2
PL6.1.36/PL7.1.36
P/J24
P/J248
P/J246
PULLUP 3.3V
LG
/NO-PAPER2 SNR ON
24V DC
CLUTCH-TRAY2 ON
Tray 2
SENSOR
NO PAPER
PL6.1.38/PL7.1.38
P/J247
Tray 2
CLUTCH ASSY PH
PL6.1.21/PL7.1.20
P/J245
HARNESS ASSY
TRAY1 PL5.1.37
P/J240
PULL UP 3.3V
LG
/NO-PAPER1 SNR ON
PULLUP 3.3V
LG
/REG SNR ON
24V DC
CLUTCH-TRAY1 ON
24V DC
CLUTCH-REGI ON
FAN ALARM
24V RTN
24V DC
Tray 1
SENSOR NO PAPER
PL5.1.38
P/J241
SENSOR
REGI
PL5.1.30
P/J242
Tray 1
CLUTCH ASSY PH
PL5.1.21
P/J243
CLUTCH REGI
PL5.1.23
P/J244
FAN MAIN
PL 12.1.10
HARNESS ASSY
TONER2
PL12.1.28
P/J22
P/J221
HARNESS ASSY
TONER1
PL5.1.50
P/J220
N.C.
24V DC
A OUT
24V RTN
D OUT
SENSOR
TONER
PL5.1.46

JG7005AA

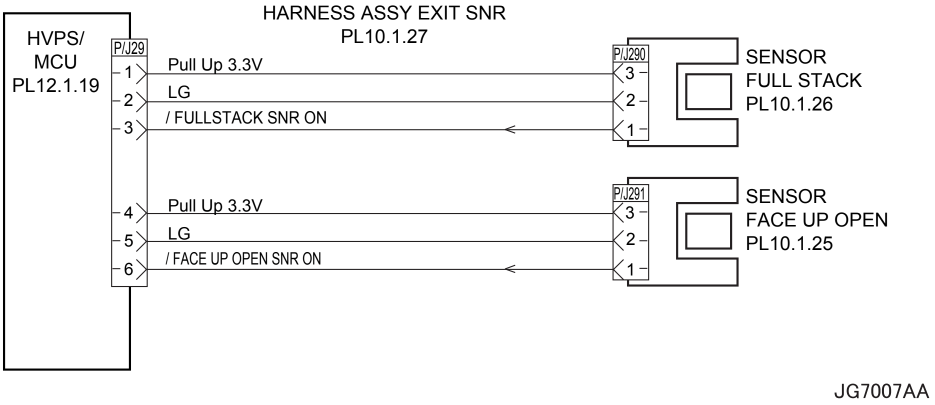
Signal line name	Description
/LOW-PAPER2 SNR ON	Signal from SENSOR LOW PAPER. This signal goes Low when light is received.
/NO-PAPER2 SNR ON	Signal from SENSOR NO PAPER of Tray2. This signal goes Low when light is received.
CLUTCH-TRAY2 ON	Control signal for CLUTCH ASSY PH of Tray2. Low: ON / High: OFF
/NO-PAPER1 SNR ON	Signal from SENSOR NO PAPER of Tray1. This signal goes Low when light is received.
/REG SNR ON	Signal from SENSOR REGI. This signal goes Low when light is received.
CLUTCH-TRAY1 ON	Control signal for CLUTCH ASSY PH of Tray1. Low: ON / High: OFF
CLUTCH-REGI ON	Control signal for CLUTCH REGI. Low: ON / High: OFF
FAN ALARM	Fan monitor signal. This signal goes High if there is a trouble with FAN MAIN.
D OUT	Signal indicating detection of toner in the EP cartridge, from SENSOR TONER.

§ 5 ROS ASSY, INTERLOCK S/W 5V, SWITCH I/L ASSY


HARNESS ASSY ROS
PL8.1.2
HARNESS ASSY
LVPS(5/6)
PL12.1.1
P/J141
P/J142
INTERLOCK
S/W 5V
PL8.1.12
N.C.
SWITCH I/L ASSY PL1.1.11
P/J144
Interlock
S/W 5V R
P/J411
Interlock
S/W
Front R
§ 1 – Ⓐ
HVPS/ MCU
PL12.1.19
ROS ASSY PL8.1.1
LDD
P/J14
P/J140
5V DC
SG
/SOS
/PCONT 1
Vref
MO/DET-OUT
/PCONT2
/LDENB
P/J201
P/J2011
SOS
5VDC AFT
/SOS
SG
P/J17
P/J170
XPDATA 2+
XPDATA 2–
P/J16
P/J160
XPDATA 1+
XPDATA 1–
P/J13
P/J131
P/J130
Scanner
24V DC
24V RTN/SG
/ROSMOT ON
/ROSMOT CLK
JG7006AB

Signal line name	Description
/SOS	SYNC signal generated by SOS Sensor. This signal commands start of each scan.
/PCONT	Sample / Hold circuit Low: Sampled (LD is forcibly lit up); High: Held
Vref	Laser output control signal for determining or adjusting the current flowing through Laser Diode.
MO/DET-OUT	Laser output monitor signal for providing feedback of laser output beam from Laser Diode (analog signal).
/LDENB	Control signal permitting emission of Laser Diode. High: Laser Diode OFF.
XP DATA+	Print image data. DATA+ > DATA-: lit up DATA+ < DATA-: put out
XP DATA-	
/ROSMOT ON	Sensor Motor Control signal for turning ON/OFF Scanner Motor. Low: ON / High: OFF
/ROSMOT CLK	Clock signal to ROS Motor.

§ 6 500 Paper Exit


HARNESS ASSY EXIT SNR
PL10.1.27
HVPS/
MCU
PL12.1.19
P/J29
1
2
3
4
5
6
Pull Up 3.3V
LG
/ FULLSTACK SNR ON
Pull Up 3.3V
LG
/ FACE UP OPEN SNR ON
P/J290
3
2
1
SENSOR
FULL STACK
PL10.1.26
P/J291
3
2
1
SENSOR
FACE UP OPEN
PL10.1.25
JG7007AA

Signal line name	Description
/FULLSTACK SNR ON	Signal from SENSOR FULL STACK. This signal goes Low when light is received.
/FACE UP OPEN SNR ON	Signal from SENSOR FACE UP OPEN. This signal goes Low when light is received.

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   1.3 Functional Structure .... 8 - 2
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   2.1 Power Supply .... 8 - 4
   2.2 Power Consumption .... 8 - 4
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   3.6 Dimensions/Mass of EP CARTRIDGE .... 8 - 10
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   4.2 Exposure System .... 8 - 11
   4.3 Transfer System .... 8 - 11
   4.4 Fixing System .... 8 - 11
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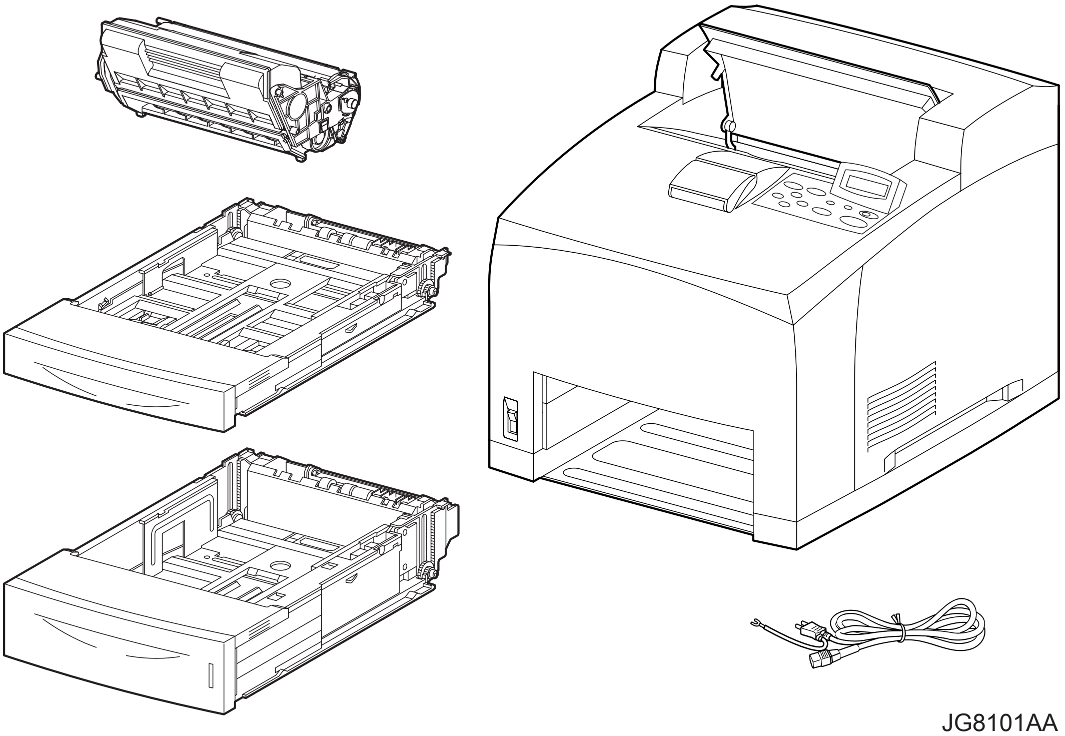
1. Machine Structure

1.1 Fundamental Structure

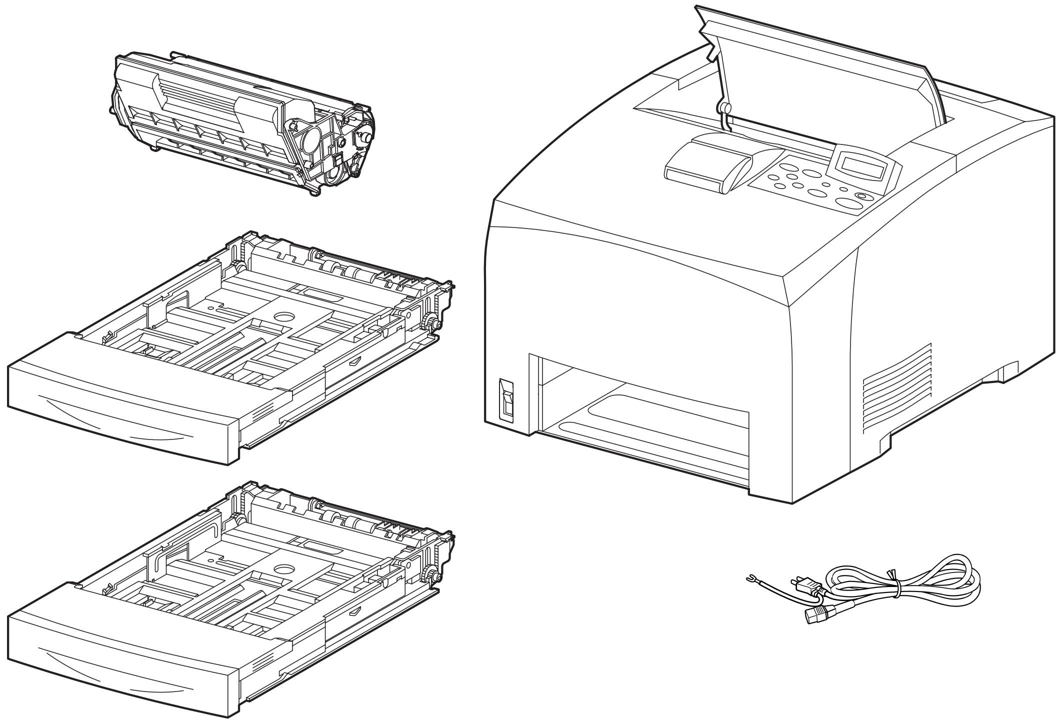
The fundamental structure of the machine consists of "print engine”, "EP CARTRIDGE", "paper cassette", and "power code".

♦ 550 Paper Cassette - Type



JG8101AA

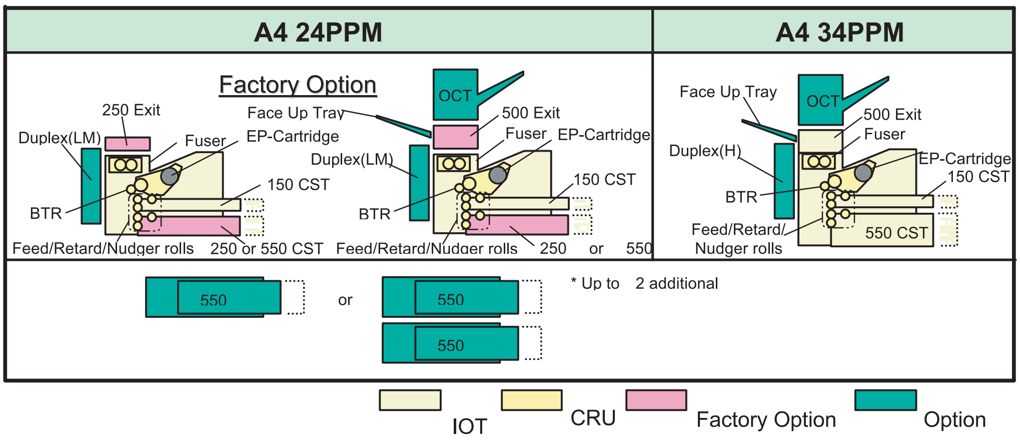
♦250 Paper Cassette - Type



JG8001AA

1.2 Optional Structure

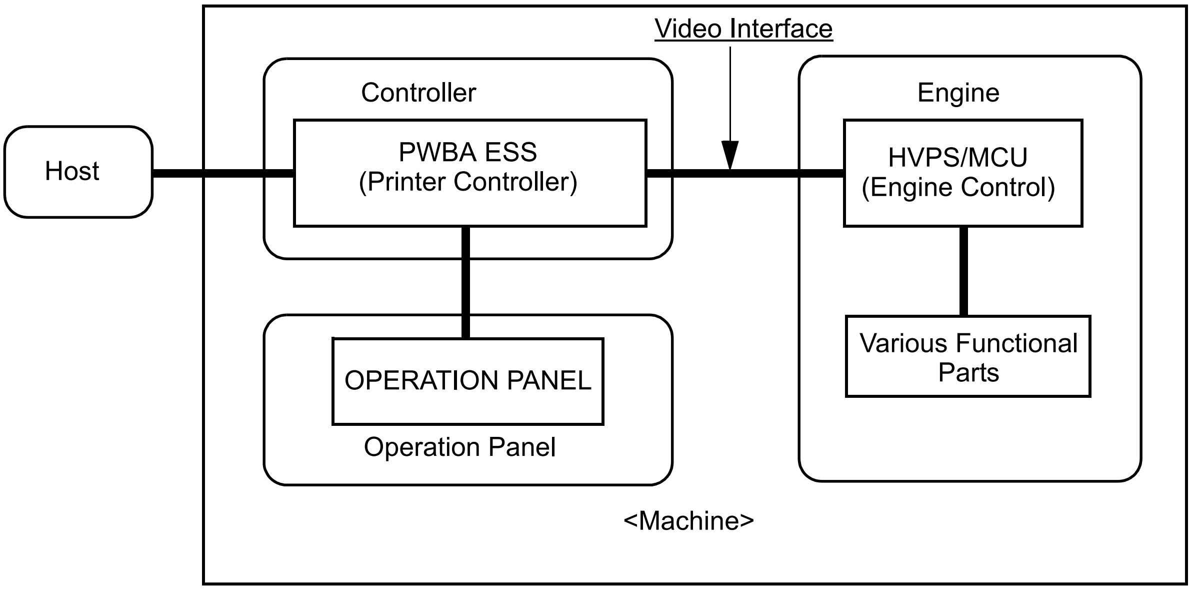
The optional structure of the machine is shown below.


A4 24PPM
A4 34PPM
Factory Option
250 Exit
Duplex(LM)
Fuser
Face Up Tray
EP-Cartridge
150 CST
BTR
Feed/Retard/Nudger rolls
250 or 550 CST
OCT
500 Exit
Fuser
EP-Cartridge
Duplex(LM)
150 CST
BTR
Feed/Retard/Nudger rolls
250 or 550
Face Up Tray
OCT
500 Exit
Fuser
Duplex(H)
EP-Cartridge
150 CST
BTR
Feed/Retard/
Nudger rolls
550 CST
550
or
550
550
* Up to 2 additional
IOT
CRU
Factory Option
Option

JG8009AA

1.3 Functional Structure

The functional structure of the machine is shown below.


Video Interface
Host
Controller
PWBA ESS
(Printer Controller)
Engine
HVPS/MCU
(Engine Control)
OPERATION PANEL
Operation Panel
Various Functional
Parts
<Machine>

1.4 ESS Standard Structure

Item	Description
CPU	24ppm: PPC 603e 250MHz(266MHz CPU) 34ppm: PPC 603e 350MHz
Memory	RAM: 64MB(24ppm) 128MB(34ppm) ROM: Max.16MB Flash Disk: Compact Flash Adapter HDD: 2.5inch (more than 20GB) *Option
External Interface	- Ethernet(10Base-T, 100Base-TX) - USB1.1 - Centronics(Full) - Serial port(25pin)
Network protocol	- TCP/IP - NetWare PServer - SMB(DLC, TCP/IP) - Port9100 - IPP - EtherTalk - Email Print - http print

2. Electrical Characteristics

2.1 Power Supply

The following three types are available as power supplies used to supply power for operation. A selection is made according to the specifications.

- ♦<100 V system>: Voltage: 90 to 110 VAC; Frequency: 50/60 Hz ± 3 Hz
- ♦<120 V system>: Voltage: 98 to 132 VAC; Frequency: 50/60 Hz ± 3 Hz
- ♦ <220/240 V system>: Voltage: 198 to 264 VAC; Frequency: 50/60 Hz ± 3 Hz

2.2 Power Consumption

Maximum power consumption during operation, current consumption during operation, and power consumption in sleep mode (including pseudo-printer controller of 5 VDC, 6 A).

Input power (rated)	Maximum power consumption	Current consumption	Power consumption		
	Machine	Machine	In sleep mode		In deep sleep mode
			At low fan speed	At fan stop	
100 VAC	980 W or lower	9.9 A	10 W	5 W	3 W or lower
110 VAC	985 W or lower	9.5 A	12 W	5 W	3 W or lower
220 VAC	985 W or lower	5 A	14 W	9 W	5 W or lower

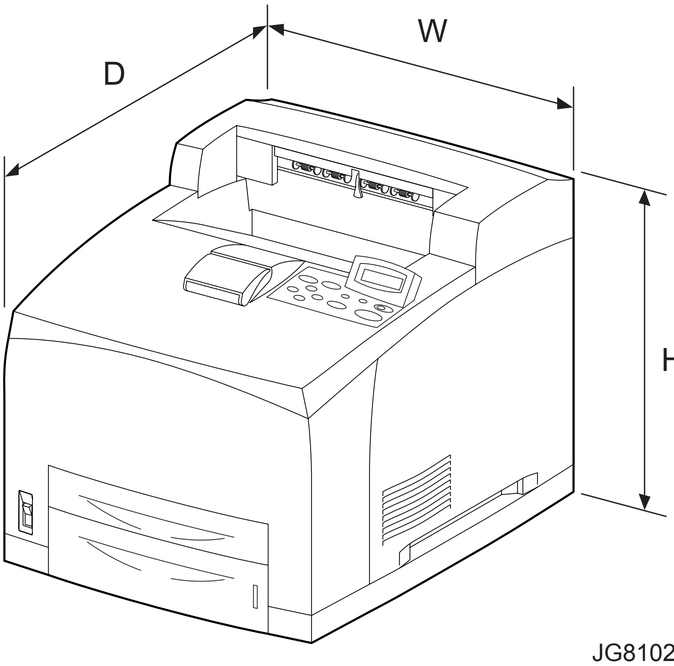
3. Mechanical Characteristics

3.1 Dimensions/Mass of the Main Body

None of the EP CARTRIDGE, printer controller, AC cable, and their accessories are included. Partial protrusions are not included either.

♦ 34PPM

Width (W): 421.8 mm
Depth (D): 465.4 mm (524.0 mm when Paper Cassette is extended)
(561.5 mm when Duplex Unit installed)
(620.1 mm when Paper Cassette is extended and Duplex Unit installed)
Height (H): 404.3 mm
Mass: 20.6 kg (22.5 kg when Duplex Unit installed)

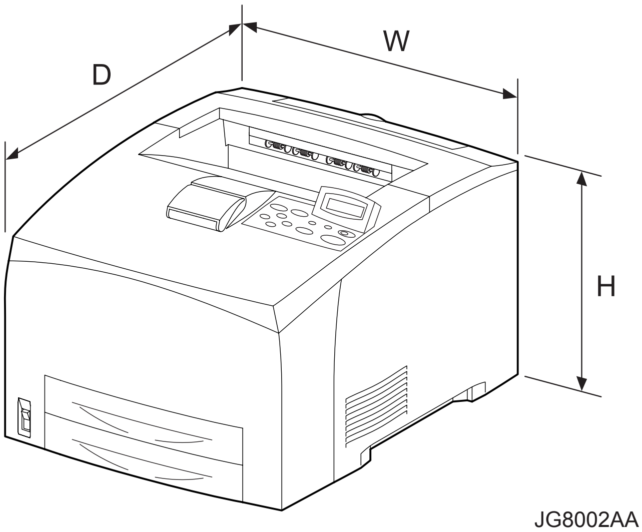


JG8102AA

♦ 24PPM

- 250 Paper Cassette / 250 Paper Exit

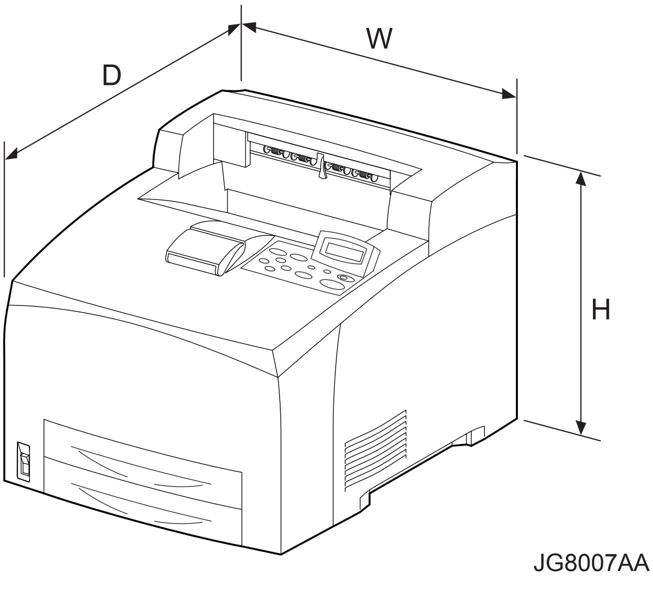
  Width (W): 421.8 mm
  Depth (D): 454.6 mm (513.2 mm when Paper Cassette is extended)
  (539.8 mm when Duplex Unit installed)
  (598.4 mm when Paper Cassette is extended and Duplex Unit installed)
  Height (H): 324.3 mm
  Mass: 18.4 kg (20.1 kg when Duplex Unit installed)



♦ 24PPM

- 250 Paper Cassette / 500 Paper Exit

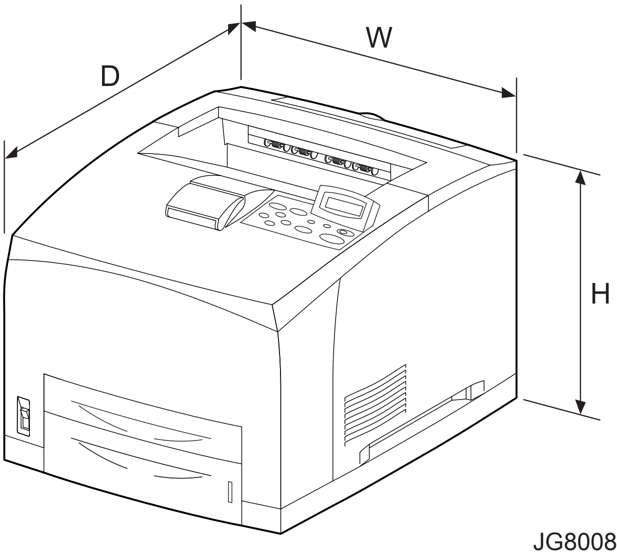
  Width (W): 421.8 mm
  Depth (D): 454.6 mm (513.2 mm when Paper Cassette is extended)
  (539.8 mm when Duplex Unit installed)
  (598.4 mm when Paper Cassette is extended and Duplex Unit installed)
  Height (H): 373.3 mm
  Mass: 19.0 kg (20.7 kg when Duplex Unit installed)



♦ 24PPM

- 250 Paper Cassette / 250 Paper Exit

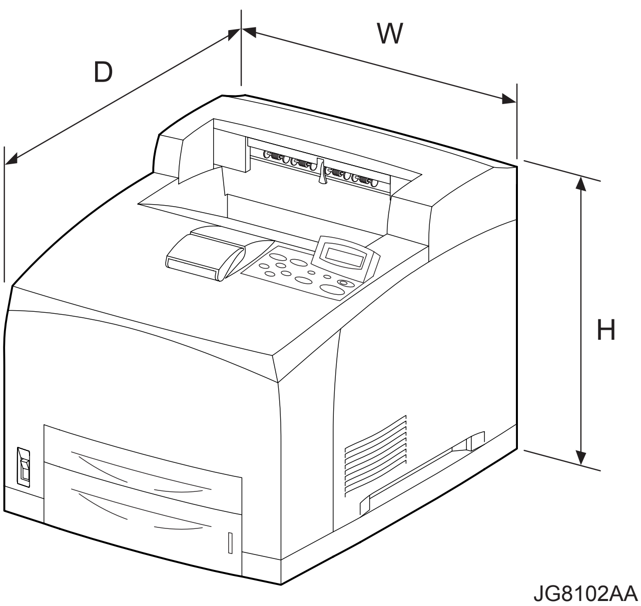
Width (W):	421.8 mm	
Depth (D):	454.6 mm	(513.2 mm when Paper Cassette is extended) (539.8 mm when Duplex Unit installed) (598.4 mm when Paper Cassette is extended and Duplex Unit installed)
Height (H):	355.3 mm	
Mass:	19.4 kg	(21.1 kg when Duplex Unit installed)



JG8008AA

- 550 Paper Cassette / 500 Paper Exit

Width (W):	421.8 mm	
Depth (D):	454.6 mm	(513.2 mm when Paper Cassette is extended) (539.8 mm when Duplex Unit installed) (598.4 mm when Paper Cassette is extended and Duplex Unit installed)
Height (H):	404.3 mm	
Mass:	20.0 kg	(21.7 kg when Duplex Unit installed)

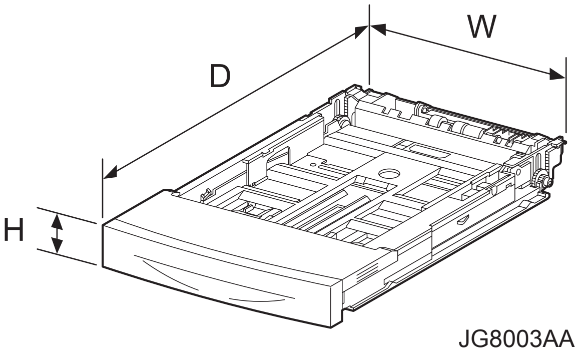


JG8102AA

3.2 Dimensions/Mass of 150 Paper Cassette

The dimensions are specified under the same posture as installed in the machine. Partial protrusions are not included.

Width (W):	283.7 mm
Depth (D):	390.6 mm (449.2 mm when extended)
Height (H):	50.4 mm
Mass:	1.60 kg

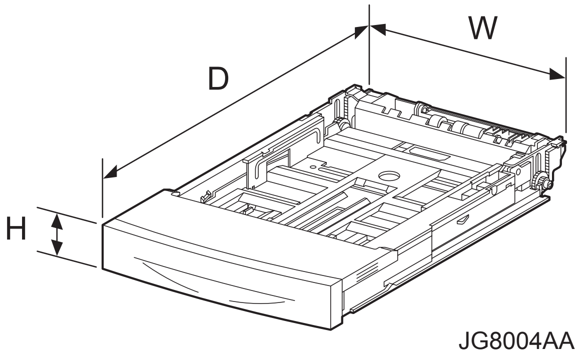


JG8003AA

3.3 Dimensions/Mass of 250 Paper Cassette

The dimensions are specified under the same posture as installed in the machine. Partial protrusions are not included.

Width (W):	283.7 mm
Depth (D):	394.6 mm (453.2 mm when extended)
Height (H):	53.8 mm
Mass:	1.67 kg

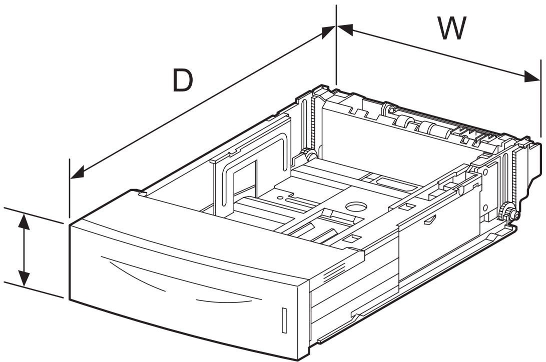


JG8004AA

3.4 Dimensions/Mass of 550 Paper Cassette

The dimensions are specified under the same posture as installed in the machine. Partial protrusions are not included.

Width (W):	283.7 mm
Depth (D):	394.6 mm (453.2 mm when extended)
Height (H):	85.6 mm
Mass:	2.12 kg

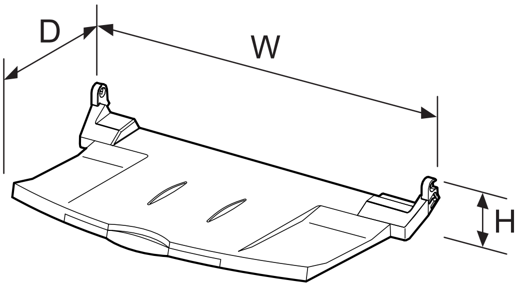


JG8005AA

3.5 Dimensions/Mass of Option Face Up Tray

The dimensions are specified under the same posture as installed in the machine. Partial protrusions are not included.

Width (W):	326.0 mm
Depth (D):	169.6 mm (266.7 mm when extended)
Height (H):	43.0 mm
Mass:	0.25 kg

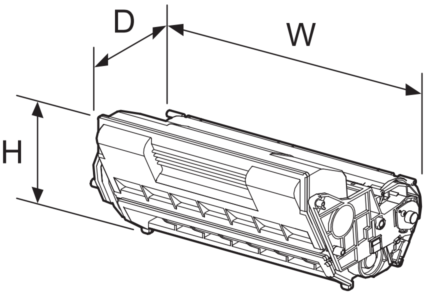


JG8711AA

3.6 Dimensions/Mass of EP CARTRIDGE

The dimensions are specified under the same posture as installed in the machine. Partial protrusions are not included.

Width (W):	298.5 mm
Depth (D):	177.4 mm
Height (H):	159.0 mm
Mass:	1.70 kg[*1] / 1.96 kg[*2]



JG8006AA

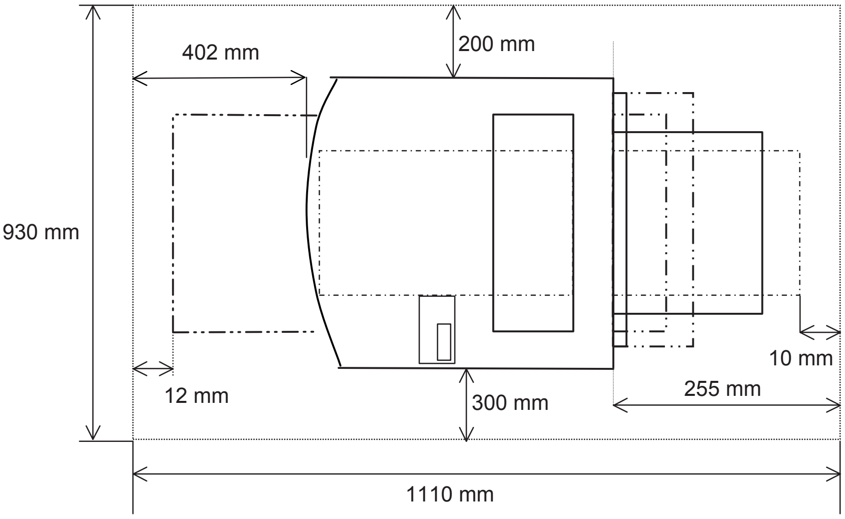
*1: 10,000-sheet EP CARTRIDGE (packed in the body)
*2: 17,000-sheet EP CARTRIDGE

Reference: ***Average number of prints at Letter size and 5% black ratio***

3.7 Installation Space (Minimum Installation Space)

The minimum space required to install the machine for normal use is as follows (excluding the space occupied by the operator).

- In the height direction, 400 mm must be secured from the top surface of the machine.



JG8103AA

4. Functions

4.1 Recording System

Electrophotography (roller charging, magnetic monocomponent toner development)

4.2 Exposure System

Semiconductor laser beam scanning

4.3 Transfer System

Roller transfer system

4.4 Fixing System

Thermal fixing using a heat roller

4.5 Resolution

- ♦ 34PPM
  Switched between 600 dpi and 1200 dpi by a video signal from the controller.
- ♦ 24PPM
  - 600dpi
  - Switched between 600 dpi and 1200 dpi by a video signal from the controller.*1

*1 Factory Option

Reference: "dpi" is an abbreviation of "dots per inch".

4.6 Warm-Up Time

Time until printing is made possible after the power is turned ON.

- ♦ 34PPM
  Within 17 seconds (Environment temperature: 22°C; Rated voltages: when nominal voltages of 100 V, 120 V, and 220 V are applied)
- ♦ 24PPM
  Within 13 seconds (Environment temperature: 22°C; Rated voltages: when nominal voltages of 100 V, 120 V, and 220 V are applied)

4.7 FPOT (First Print Output Time)

FPOT (First Print Output Time) is the time from the instant when START command is received in READY state to the instant when the first sheet is output. The following values are theoretical values.

♦ 34PPM

Paper size	Tray 1 (sec)	Tray 2 (sec)
Letter (SEF)	8.7	8.7
A4 (SEF)	8.7	8.7

♦ 24PPM

- 250 Paper Cassette / 250 Paper Exit

Paper size	Tray 1 (sec)	Tray 2 (sec)
Letter (SEF)	10.1	10.1
A4 (SEF)	10.2	10.2

- 550 Paper Cassette / 250 Paper Exit

Paper size	Tray 1 (sec)	Tray 2 (sec)
Letter (SEF)	10.1	10.1
A4 (SEF)	10.2	10.2

Reference: ***"SEF" is an abbreviation of "Short Edge Feed", and means the case where feeding is done from the shorter side of the paper.***

4.8 Continuous Print Speed

- 34PPM

Paper size	Simplex (ppm)	Simplex OHP Mode (ppm)	Simplex Thick Stock Mode1 (ppm)	Simplex Thick Stock Mode2 (ppm)
Letter (SEF)	35.7	17.6	25.4	10.8
A4 (SEF)	34.0	17.6	25.3	10.8
Legal 14" (SEF)	29.2	-	25.2	10.7
Legal 13" (SEF)	31.1	-	25.3	10.7
Executive	35.7	-	25.4	10.8
B5(JIS) (SEF)	35.8	-	25.4	10.8
Envelopes	-	-	15.7	10.8

- 24PPM

Paper size	Simplex (ppm)	Simplex OHP Mode (ppm)	Simplex Thick Stock Mode1 (ppm)	Simplex Thick Stock Mode2 (ppm)
Letter (SEF)	25.4	13.2	21.1	8.8
A4 (SEF)	24.1	12.6	20.3	8.7
Legal 14" (SEF)	20.7	-	17.8	6.8
Legal 13" (SEF)	22.0	-	18.7	6.8
Executive	25.4	-	21.1	8.8
B5(JIS) (SEF)	25.4	-	21.1	8.8
Envelopes	-	-	13.3	8.8

Reference: ***"ppm" is an abbreviation of "Prints Per Minute."***
Reference: ***"SEF" is an abbreviation of "Short Edge Feed", and means the case where feeding is done from the shorter side of the paper.***

4.9 Feedable Paper Size/Printable Area

4.9.1 Feedable Paper Size

The minimum and maximum sizes of paper that can be fed by the machine are as follows:

- 150 Paper Feeder
  Width: 76.2 mm (min) to 215.9 mm (max)
  Length: 127.0 mm (min) to 355.6 mm (max)

- 550 Paper Feeder / 250 Paper Feeder
  Width: 98.4 mm (min) to 215.9 mm (max)
  Length: 148.0 mm (min) to 355.6 mm (max)

4.9.2 Printable Area

The print engine shall be capable of producing printed images meeting the Print Quality Spec to within 4 mm of the edge of the paper.

4.10 Input Characteristics

4.10.1 Paper Feeding Method

Paper is fed with a paper tray set in the feeding mechanism at the bottom of the machine.

<Three kinds of paper trays can be set in the machine: 150 Paper Cassette, 250 Paper Cassette (24PPM Only), 550 Paper Cassette, and Option 550 Paper Cassette.>

NOTE **Optional paper feed units can be installed. Paper feeding can be done from four locations at maximum.**

Reference: For feedable paper size/weight, refer to "4.12 Paper" in this chapter.

4.10.2 Paper Feeding Capacity

- ♦ 150 Paper Cassette
  Plain Paper: Less than 150 sheets of standard paper or less than 17.5 mm of paper level
- ♦ 250 Paper Cassette (24PPM Only)
  Plain Paper: Less than 250 sheets of standard paper or less than 27.6 mm of paper level
- ♦ 550 Paper Cassette
  Plain Paper: Less than 550 sheets of standard paper or less than 59.4 mm of paper level

4.10.3 Combinations of Paper Feeders and Total Number of Sheets Fed

Up to 4 stages can be combined using the body and optional paper feeders. Based on standard paper, the total number of sheets fed and combinations are as follows:

♦ 34PPM / 24PPM (550 Paper Cassette)

Combination	1st stage (standard)	2nd stage (standard)	3rd stage (optional)	4th stage (optional)	Total number of sheets fed
1	150 sheets	550 sheets	No	No	700 sheets
2	150 sheets	550 sheets	550 sheets	No	1250 sheets
3	150 sheets	550 sheets	550 sheets	550 sheets	1800 sheets

♦ 24PPM (250 Paper Cassette)

Combination	1st stage (standard)	2nd stage (standard)	3rd stage (optional)	4th stage (optional)	Total number of sheets fed
1	150 sheets	250 sheets	No	No	400 sheets
2	150 sheets	250 sheets	550 sheets	No	950 sheets
3	150 sheets	250 sheets	550 sheets	550 sheets	1500 sheets

4.11 Output Characteristics

4.11.1 Paper Output Method

Paper can be output by the following methods:

- Face-down output
  Paper is output onto the top cover (COVER TOP ASSY) of the machine with the printed surface downward.
- Face-up output (Option)
  Paper is output onto the Face Up Tray with the printed surface upward.

4.11.2 Paper Output Capacity

NOTE **The following is specified for paper immediately after taken out of its package at an environment temperature/humidity of 22°C/55-60%RH.**

- 34PPM

Paper	Number of sheets the paper output section holds
FUJI XEROX P Paper A4 SEF	500 sheets
4024 20lb Letter SEF	500 sheets
4200 20lb Letter SEF	500 sheets
RX 80 A4 (3R91720) SEF	500 sheets

- 24PPM

Paper	Number of sheets the paper output section holds
FUJI XEROX P Paper A4 SEF	250 sheets
4024 20lb Letter SEF	250 sheets
4200 20lb Letter SEF	250 sheets
RX 80 A4 (3R91720) SEF	250sheets

4.11.3 Supported paper size

- Option Face Up Tray

Width:	88.9 mm to 215.9 mm
Length:	127.0 mm to 297.0 mm

4.12 Paper

4.12.1 Types of Paper

The types of paper that can be used in the machine are classified into "standard paper", "general-purpose paper", and "special-purpose paper."

♦ Standard paper

This is a recommended paper, whose reliability, feedability, and print quality fall within the range of the specifications.

The following types of paper are taken as standard paper:

- FUJI XEROX P (A4 size)
- XEROX 4024 201b (Letter size)
- XEROX 4200 201b (Letter size)
- RX 80; 3R91720 (A4 size)

♦ General-purpose paper

This is a plan paper other than standard paper, whose reliability and feedability fall within the range of the specifications, but whose print quality is outside the range.

The following types of paper are taken as general-purpose paper.

- Regular-sized paper
  - ∗ FUJI XEROX EP (A4 size)
  - ∗ FUJI XEROX EPR (A4 size)
  - ∗ FUJI XEROX L (A5 size)
  - ∗ FUJI XEROX P (B5 size)
  - ∗ FUJI XEROX EP (B5 size)
  - ∗ FUJI XEROX L (A4 size)
  - ∗ FUJI XEROX L (B5 size)
  - ∗ FUJI XEROX R (A4 size)
- Undefined paper
  - ∗ FUJI XEROX L
  - ∗ FUJI XEROX J

♦ Special-purpose paper

This is a special-purpose paper other than plain paper, whose reliability and feedability fall within the range of the specifications, but whose print quality is outside the range.

NOTE **Where special-purpose paper is fed from an optional paper feed unit, the reliability and feedability are also outside the range of the specifications.**

The following kinds of paper are taken as special-purpose paper.

- OHP Film
- Label Paper
- Envelope
- Postal Card
- Colored Paper
- Tracing Paper
- Thick Paper
- Punched Paper
- Perforated Paper
- Strips of Paper
- LaserAce A
- Recycled Paper (EP and R)

4.12.2 Paper Weight

- Paper fed from the paper tray
  60 to 216 g/m^2

4.12.3 Paper Size

The following table shows the paper sizes that can be set in each paper feed section. ("O" indicates an available paper size.)
Every kind of paper is set in the SEF (Short Edge Feed) direction.

Type	Paper size (mm × mm)	Paper Tray	
		150 Paper Feeder	250/550 Paper Feeder
LEGAL14"	215.9 × 355.6	O	O
LEGAL13"	215.9 × 330.2	O	O
LETTER	215.9 × 279.4	O	O
EXECTIVE	184.2 × 266.7	O	O
STATEMENT	139.7 × 215.9	O	O
A4	210.0 × 297.0	O	O
B5 (JIS)	182.0 × 257.0	O	O
B5 (ISO)	176.0 × 250.0	O	O
1/3 A4	99.0 × 210.0	O	O
A5	149.0 × 210.0	O	O
A6	105.0 × 148.5	O	O
Commercial #10	104.8 × 241.3	O	O
Envelope C5	162.0 × 229.0	O	O
Envelope DL	110.0 × 220.0	O	O
Monarch	98.4 × 190.5	O	O
Official Postal Card	100.0 × 148.0	O	O
US Official Postal Card	88.9 × 139.7	O	X
Index Card	76.2 × 127.0	O	X

4.13 Print Function

4.13.1 Built-in font

	Description
PCL	Agfa HP4000/8000 Series compatible, European font 80 fonts
	Agfa HP4000/8000 Series compatible, OCR-A
	Agfa HP4000/8000 Series compatible, OCR-B
	Agfa HP4000/8000 Series compatible, Line Printer
	Agfa USPS POSTENT Bar Code
	Agfa HP2200 compatible, Arabic font 6 fonts
PS	Adobe PostScript 136 fonts

4.13.2 TureType font

Selecting fonts	Procedures
Replacement with built-in font	Replace the font with built-in font in accordance with the editable correspondence table and print it out, or rastrerize it on a computer and transfer it to a printer and print it out.
Regular use of TrueType font	1. Rasterize all the fonts on a computer and transfer them to a printer, then print them out. 2. Use both bit-mapped font and downloaded TrueType font.

4.14 Ethernet

4.14.1 Connector

RJ-45

4.14.2 Printing Protocol

Protocol	OS
Ipd over TCP/IP	Windows95/98/Me(DPU), WindowsNT4.0, Windows2000, XP
SMB over TCP/IP	Windows95/98/Me, WindowsNT4.0, Windows2000, XP
PServer over NCP/IPX(NDS)	NetWare 3.12, 3.2, 4.1, 4.11, 4.2, 5, 6
PAP over ATP/DDP(EtherTalk)	MacOS7.6.1 or later version, OpenTransport 1.1.2or later version
SMB over NetBEUI	Windows95/98/Me, WindowsNT4.0, Windows2000(, XP)
IPP/http over TCP/IP	Windows2000, XP
Port 9100(RawDataSocket(RDS)) over TCP/IP	WindowsMe, Windows2000, XP

4.14.3 Management Protocol

Protocol	OS
DHCP	WindowsNT4.0, Windows2000, XP
ICMP/IP	Windows95/98/Me, WindowsNT4.0, Windows2000, XP
SNMP over UDP/IP	IP Setup tool(Windows95/98/Me, WindowsNT4.0, Windows2000, XP)
SNMP over IPX	NW Setup tool(Windows95/98/Me, WindowsNT4.0, Windows2000, XP)
lpd(lpq) over TCP/IP	Windows95/98/Me(DPU), WindowsNT4.0, Windows2000, XP
http over TCP/IP	Web browser(Internet Explorer4.0 or later version, Netscape Navigator4.0 or later version)
PAP over ATP/DDP(EtherTalk)	MacOS, Print Monitor
SMB over TCP/IP	Windows95/98/Me, WindowsNT4.0, Windows2000, XP
SMB over NetBEUI	Windows95/98/Me, WindowsNT4.0, Windows2000(, XP)
IPP/http over TCP/IP	WindowsMe, Windows2000, XP

4.15 Client Hard Ware

Hard Ware	Operating conditions
PC-AT compatible machine	Operation on Windows 95/98/Me or NT4.0, Windows 2000 and Windows XP shall be guaranteed. (Intel compatible)
Macintosh	Operating on MAC OS 7.6.1 or later version shall be guaranteed. (From Open Transport 1.1.2 up to Mac OS 210.x)

4.16 Client OS

Client OS	Driver	Direct Print Utility	Network Utility	SSN
Windows95/98/Me for English	Support	Support	Support	Support
WindowsNT4.0 for English	Support	-	Support	Support
Windows2000 for English	Support	-	Support	Support
WindowsXP for English	Support	-	Support	Support
MacOS for English 7.6.1 or later version	Support	-	-	-

4.17 Server OS

- Windows NT4.0
- Windows 2000
- Windows XP
- NetWare 3.12, 3.2, 4.1, 4.11, 5, 6
- Windows 95/98/Me

5. Consumables

Although consumables are replaced by the user, when a fault due to consumables has occurred and repairs are necessary, or when faults are classified and tracked down, consumables may be replaced by the serviceman.

5.1 Consumable Items

- ♦ Paper
  Refer to the above-mentioned specifications of paper.
- ♦ EP CARTRIDGE
  This is an integrated cartridge consisting of an OPC drum, black toner, a development unit, a charging unit, and a drum cleaner unit. Besides the standard 6,000-sheet print cartridge, 10,000-sheet and 17,000-sheet print cartridges can be selected.

  "Detection using the remaining amount of toner" (factory optional) is available to detect the life of the EP CARTRIDGE. When the cartridge runs out of toner, a WARNING status signal is sent to the controller.

NOTE

The number of prints of each toner cartridge is a rough measure under environments of 22°C/55-60%RH and under conditions of continuous feeding of standard paper (Letter-size) with 5% image coverage.

6. Regularly Replaced Parts

To prevent faults, the following parts are recommended to be replaced at every given number of prints.

NOTE

The life of each of the following regularly replaced parts is indicated by the number of prints, which is a rough measure under environments of 22°C/55-60%RH and under conditions of continuous feeding of standard paper (Letter-size) with 5% image coverage.

Parts	Specifications (in prints)
FUSER ASSY	200,000
KIT ROLL ASSY FEED *1	200,000
BTR ASSY *2	200,000

*1: A kit consisting of najor, field, and retard rolls.

*2: In duplex printing, printing on both surfaces is transformed into 2 PVs (print volumes).

7. Use Environment

7.1 Installation Temperature/Humidity

During operation: 5 to 35°C / 15 to 85%RH
(At 35°C, 70%RH is the upper limit. At 85%RH, 32°C is the upper limit. No dewing.)
During non-operation: -20 to 40°C / 5 to 85%RH (no dewing)

NOTE **The environment where the image quality is guaranteed is different from the above-described environment.**

7.2 Installation Height

0 to 3,500 m

7.3 Installation Horizontality

The machine must be installed horizontally at a tilt within 5°.

7.4 Installation Surrounding Light

Less than 3000 Lux (no direct sunshine)

7.5 Generated Noise

- 34PPM
  During operation: less than 6.62 B (A) *
  less than 7.30 B (A) * (when options are fully installed)
  During standby: less than 4.00 B (A)*

- 24PPM
  During operation: less than 6.30 B (A) *
  less than 6.80 B (A) * (when options are fully installed)
  During standby: less than 4.00 B (A)*

* Except for impulsive sound

NOTE **Full Option = Machine + Option 550 Paper Feeder (two stages) +Duplex + OCT**

8. Safety/Environmental Protection

8.1 Safety Standards

- 100V/120V system
  UL60950 3rd Edition
  CSA C22.2 No.60950-00
- 220V/240V system
  IEC60950 3rd Edition

8.2 Laser Safety Standards

- 100V/120V system
  FDA21CFR Chapter 1, Subchapter J, Section 1010, 1040
- 220V/240V system
  IEC60825 Class I Laser Product

8.3 EMI

- 100V system
  VCCI Information Processing Equipment Class B
- 100V/120V system
  FCC Part15 Subpart B, Class B (ANSI C63.4)
- 220V/240V system
  EN55022 (CISPR Publication 22), Class B

9. Print Image Quality

9.1 Environment where Image Quality is Guaranteed

Condition	Temperature	Humidity	Remarks
Installation image quality (1-500 prints)	18 to 27°C	20 to 65%RH	Measured at 22°C, 55%RH
Used image quality (more than 501 prints[*])	10 to 32°C	15 to 85%RH	28°C at 85%RH

[*] Upper limit of EP CARTRIDGE

9.2 Image Quality Guaranteed Paper

Image quality is specified using standard paper immediately after taken out of its package that was allowed to stand in an operative environment for 12 hours in packaged condition.
Items associated with print matching are specified with Letter-size standard paper.

9.3 Print Matching

- Lead edge registration: less than ± 2.0 mm
- Side edge registration: less than ± 2.5 mm
- Skew feeding: less than ± 1.2 mm (at distance of 190 mm)
- Perpendicularity: less than ± 0.8 mm (at distance of 114.5 mm)
- Parallelism: less than ± 1.2 mm (at distance of 234 mm)
- Linearity of paper transport direction: less than ± 0.5 mm (at distance of 234 mm)
- Linearity of the direction vertical to paper transport direction:
  less than ± 0.5 mm (at distance of 190 mm)
- Linearity of a direction oblique to paper transport direction:
  less than ± 1.2 mm (at distance of 269 mm)
- Magnification in the direction of Paper Transport:
  less than 100% ± 0.5 % (at distance of 234 mm)
- Magnification in the direction vertical to paper transport direction:
  less than 100% ± 0.5 % (at distance of 190 mm)

Reference ***The above-described stipulations are in the case of using Letter size paper. The stipulations vary proportionately according to the measured length of the paper size except for the magnifications.***

10. Options

10.1 Factory Options

♦ 34PPM

The three options which are factory-installed according to the specifications are as follows:

- Toner Sensor function
  This is a function of detecting that the toner level in the EP CARTRIDGE is low, using SENSOR TONER.
- Low Paper Sensor function
  This is a function of detecting that the paper in the paper cassette is low, using SENSOR LOW PAPER.
- EP CARTRIDGE with peeling fingers

♦ 24PPM

The five options which are factory-installed according to the specifications are as follows:

- Toner Sensor function
  This is a function of detecting that the toner level in the EP CARTRIDGE is low, using SENSOR TONER.
- Low Paper Sensor function
  This is a function of detecting that the paper in the paper cassette is low, using SENSOR LOW PAPER.
- EP CARTRIDGE with peeling fingers
- 1200dpi
- 500 Paper Exit

10.2 User-Installed Options

The four options that the user can install are as follows:

♦ Option 550 Paper Feeder (with Option 550 Paper Cassette)
  This is the same as the paper tray installed in the machine body. This can hold about 550 sheets of standard paper.

♦ Option Duplex
  This is a transport mechanism that can be added on to the machine to perform duplex printing by inverting the paper.

♦ Option OCT
  This is a paper output unit that can be added on to the machine to shift the paper output position at every desired number of prints.

♦ Option Face Up Tray
  This is a tray that is added on to the machine to receive the output paper with the printed surface upward.

10.3 ESS Options

♦ Extension Network ROM Kit
♦ Expanded RAM module(128MB SO-DIMM)
♦ Expanded RAM module(256MB SO-DIMM)
♦ Parallel Interface Cable
♦ Serial Interface Cable
♦ USB Cable